

THE CITY OF  
GREENVILLE

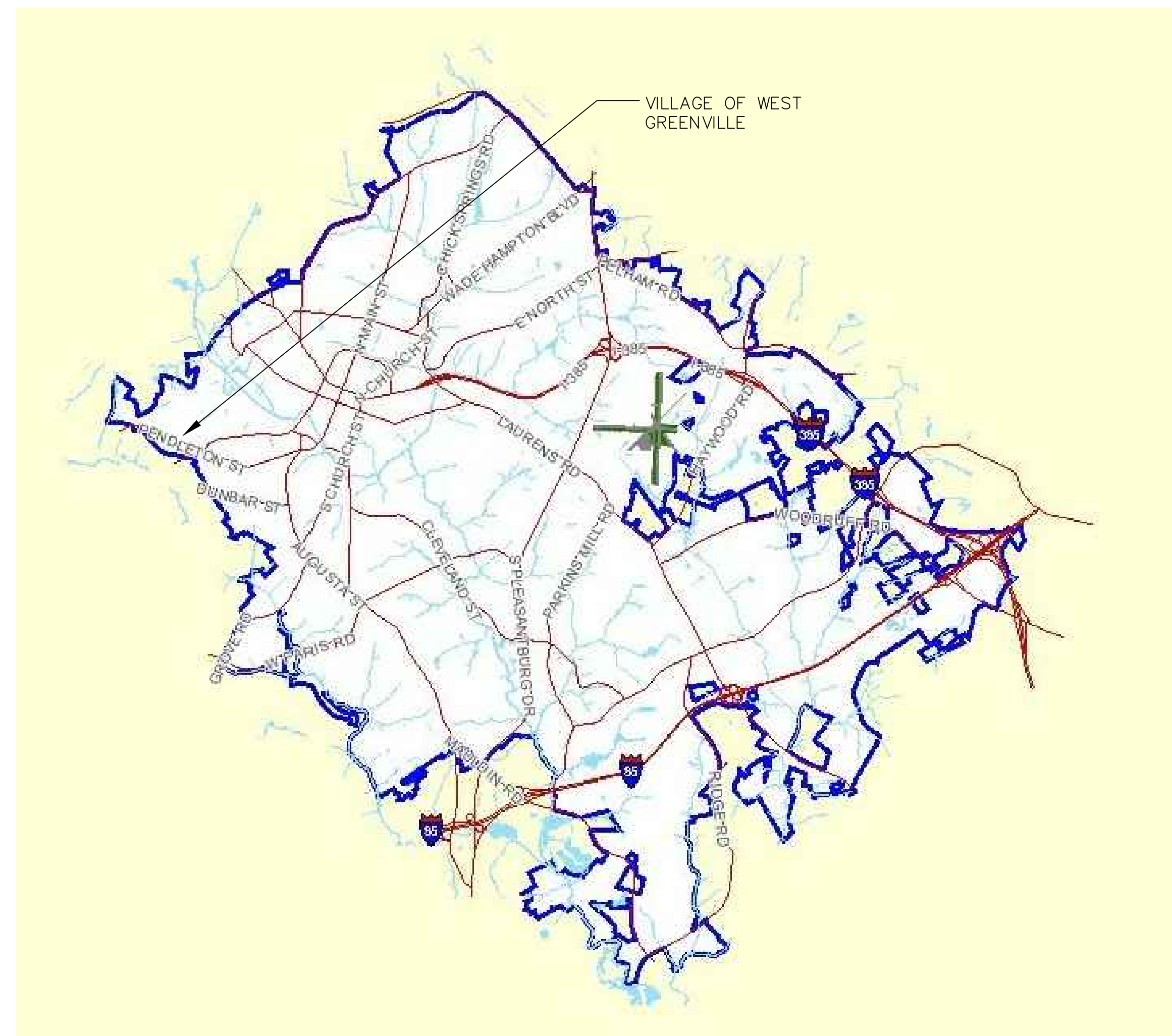
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NPDES PERMIT INFORMATION

NPDES DISTURBED  
AREA = 0.016 ACRE(S)


RAILROAD INVOLVEMENT?  
YES / (NO)



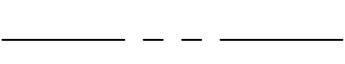
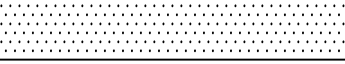
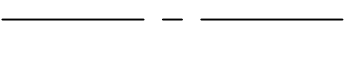
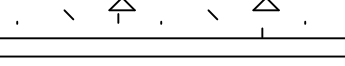
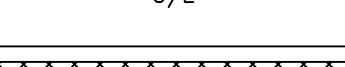


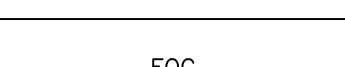
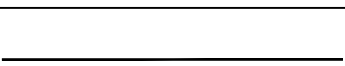
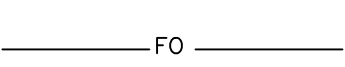
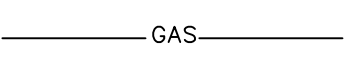
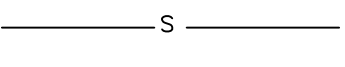
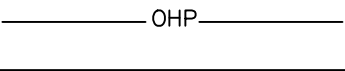
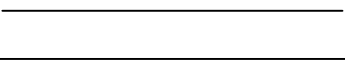
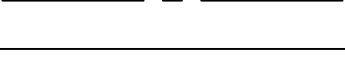
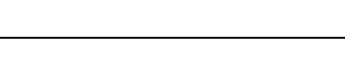
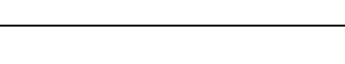
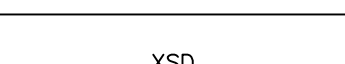

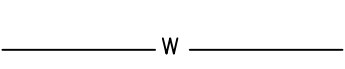


CITY OF GREENVILLE LOCATION MAP

NOTE:  
ALL WORKMANSHIP AND MATERIAL ON THIS PROJECT IS TO CONFORM TO THE CITY OF GREENVILLE STANDARD DRAWINGS AND CONSTRUCTION SPECIFICATIONS AND SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND BOOK OF STANDARD DRAWINGS FOR ROAD CONSTRUCTION (LATEST PUBLISHED ENGLISH REVISION).

APPROVED BY:

  
DWAYNE A. COOPER, PE  
ENGINEERING SERVICES MANAGER

LEGEND

	APPROXIMATE PROPERTY LINES
	ASPHALT
	CENTERLINE
	CONCRETE
	CONSTRUCTION LIMITS
	DEMOLITION_ASPHALT
	DEMOLITION_CONCRETE
	EXISTING GRADE
	FACE OF CURB
	FACE OF GUTTER
	FIBER OPTIC
	GAS LINE
	INLET PROTECTION
	OVERHEAD POWER
	PROFILE FINISHED GRADE
	PROPERTY LINES
	SANITARY SEWER
	SILT FENCE
	STORM DRAIN
	STORM DRAIN_EXISTING
	TELEPHONE
	WATER

THE UTILITIES SHOWN ARE FOR THE CONTRACTORS CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATIONS OF ALL UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE MADE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

### 3 DAYS BEFORE DIGGING IN SOUTH CAROLINA

CALL 1-800-922-0983  
PALMETTO UTILITY PROTECTION SERVICE

# VWGS IRIS SCAPHE PHASE IV

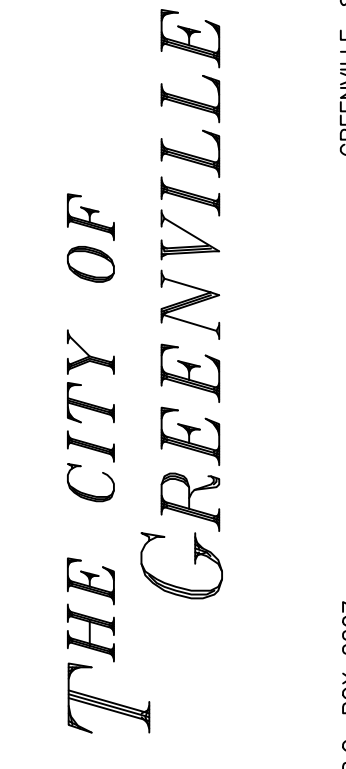

**CITY OF GREENVILLE**  
GREENVILLE, S.C.

FILE

DRAWING NO.	
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GENERAL NOTES																
1.	TOPOGRAPHIC AND BOUNDARY SURVEY BY THE CITY OF GREENVILLE (864-467-4400).															
2.	THE CONTRACTOR SHALL VERIFY THE LOCATION AND INVERT ELEVATION OF ALL UNDER GROUND UTILITIES, AND VERIFY PROPERTY CORNERS AND TOPO BEFORE ANY CONSTRUCTION IS BEGUN. CALL PUPS (PALMETTO UTILITY PROTECTION SERVICE) AT 1-800-922-0983 THREE (3) DAYS BEFORE ANY EXCAVATION TO LOCATE ALL BURIED CABLES AND UNDERGROUND UTILITIES. GWS (GREENVILLE WATER SYSTEM) MUST BE CONTACTED SEPARATELY FROM PUPS. PRIOR TO INSTALLATION OF STORM OR SANITARY SEWER, THE CONTRACTOR SHALL VERIFY THE INVERTS OF EXISTING STRUCTURES AND INFORM THE OWNER AND THE ENGINEER OF ANY CONFLICTS PRIOR TO CONSTRUCTION.															
3.	THE CONTRACTOR SHOULD NOTIFY THE ENGINEER FOR A REVIEW SHOULD DISCREPANCIES BE DISCOVERED AT THE SITE OR ON THE DRAWINGS BEFORE OR DURING CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE BETWEEN ALL CIVIL DRAWINGS WITH GRADING AND UTILITY CONTRACTORS IN ORDER TO AVOID PROBLEMS DURING CONSTRUCTION.															
4.	CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION MEETING WITH ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER AND UTILITY COMPANIES DURING CONSTRUCTION OF SEWER SO PERIODIC OBSERVATIONS CAN BE MADE. CONTRACTOR WILL CERTIFY TO THE ENGINEER IN WRITING THAT THE SEWER LINES HAVE BEEN TESTED AND CONSTRUCTED ACCORDING TO THE DRAWINGS AND SPECIFICATIONS.															
5.	EXISTING DRAINAGE STRUCTURES TO BE INSPECTED AND REPAIRED AS NEEDED AND EXISTING PIPES TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.															
6.	ALL REFERENCE TO SPECIFICATIONS FOR HIGHWAY CONSTRUCTION OR MATERIALS ARE MADE FROM SOUTH CAROLINA STATE HIGHWAY DEPARTMENT'S STANDARD SPECIFICATION, LATEST EDITION.															
7.	ALL DIMENSIONS SHOWN ARE MEASURED TO FACE OF CURB LINE.															
8.	EARTHWORK SHALL BE TO THE LINES AND GRADES SHOWN ON THE CROSS SECTIONS, OR AS DIRECTED BY THE ENGINEER, AND IN ACCORDANCE WITH ALL SPECIFICATIONS. PROOF ROLLING AND COMPACTION TEST SHALL BE ACCOMPLISHED IN THE FIELD TO TEST ALL AREAS. THE CONTRACTOR SHALL RETAIN THE SERVICES OF A TESTING COMPANY TO TEST ALL AREAS. FILL SHALL BE PLACED IN LOOSELY MEASURED LIFTS NOT EXCEEDING 8" LOOSE THICKNESS.															
9.	CONTRACTOR SHALL PROTECT ALL TREES THAT ARE TO REMAIN AS MARKED ON THE PLANS OR IN THE FIELD BY OWNER'S REPRESENTATIVE.															
10.	THE GRADING CONTRACTOR SHALL PROOF-ROLL THE CONSTRUCTION AREA WITH A FULLY-LOADED TANDEM-AXLE DUMP TRUCK, OR APPROVED EQUAL, BY MAKING 2 COMPLETE PASSES IN EACH TRAVELED LANE. ALL SOFT SPOTS SHALL BE UNDERCUT AND RE-COMPACTED WITH SUITABLE STRUCTURAL FILL MATERIAL. MINIMUM AXLE WEIGHT = 10 TONS.															
11.	THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND WILL NOT BE LIMITED TO NORMAL WORKING HOURS. THE DUTY OF THE ENGINEER TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON, OR NEAR THE CONSTRUCTION SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL BARRICADES, WARNING SIGNS, FLASHING LIGHTS, AND TRAFFIC CONTROL DEVICES DURING CONSTRUCTION. THE CONTRACTOR IS TO COMPLY WITH ALL OSHA REGULATION, REQUIREMENTS, AND SAFETY MEETING REQUIREMENTS.															
12.	ALL NEW ELEVATIONS SHOWN ARE FINISH GRADE ELEVATION.															
13.	THE CONTRACTOR SHALL REMOVE ALL TREES AND VEGETATION THAT ARE WITHIN 5 FEET OF NEW CONSTRUCTION (UNLESS NOTED OTHERWISE). REMOVE DEBRIS FROM SITE IN ACCORDANCE WITH ALL LOCAL LAWS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING NECESSARY PERMITS. PROTECT ALL TREES THAT ARE TO REMAIN.															
14.	TOPSOIL SHALL BE STRIPPED TO A DEPTH AS REQUIRED AND STOCKPILED AS DIRECTED BY THE OWNER'S REPRESENTATIVE.															
15.	THE TOP 18" OF FILL SHALL BE COMPACTED TO 98% OF MAXIMUM DRY DENSITY BY THE STANDARD PROCTOR METHOD ASTM D-698. ALL OTHER FILL SHALL BE COMPACTED TO 95" MAXIMUM DRY DENSITY. MOISTURE SHALL BE CONTROLLED TO WITHIN +-2% OF OPTIMUM.															
16.	ALL EXCAVATION SHALL BE "UNCLASSIFIED EXCAVATION" OR "BORROW EXCAVATION," UNLESS SPECIFIED OTHERWISE. BORROW EXCAVATION INCLUDES MATERIAL BROUGHT IN OFF-SITE. ROCK EXCAVATION, IN THE EVENT IT IS ENCOUNTERED, INCLUDES SUCH MATERIAL, WHICH CANNOT BE REMOVED BY MEANS OTHER THAN BY BLASTING OR WITH AN AIR HAMMER.															
17.	THE CLASSIFICATION OF SOILS INCLUDE: TOPSOIL, FILL MATERIAL, UNSUITABLE MATERIAL, AND ROCK EXCAVATION. THE CLASSIFICATION OF SOILS IS THE RESPONSIBILITY OF THE CONTRACTOR'S TESTING FIRM.															
18.	ALL FILL MATERIAL SHALL CONSIST OF AN APPROVED MATERIAL AND BE FREE OF ORGANIC MATTER AND DEBRIS. IMPORTED FILL SHALL HAVE A MINIMUM STANDARD PROCTOR MAXIMUM DRY DENSITY OF 90 PCF, A LIQUID LIMIT NO GREATER THAN 40, AND PLASTICITY INDEX LESS THAN 15.															
19.	ALL EXISTING SLOPES STEEPER THAN 4:1 THAT WILL RECEIVE FILL SHALL BE PLOWED AND SCARIFIED SO NEW FILL WILL BOND WITH EXISTING SURFACE.															
20.	CONTRACTOR SHALL SCARIFY ALL EXISTING ASPHALT PAVEMENT BEFORE PLACING FILL, UNLESS OVERLAYING ASPHALT ONTO EXISTING ASPHALT.															
21.	THE GRADING CONTRACTOR SHALL CONFORM TO ELEVATIONS AND DIMENSIONS SHOWN WITHIN A TOLERANCE OF PLUS OR MINUS 0.05 FEET.															
22.	SPOT ELEVATIONS SHALL TAKE PRECEDENCE OVER CONTOURS AND SLOPES SHOWN. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF SPOT ELEVATIONS WHICH DO NOT APPEAR TO BE CONSISTENT WITH THE CONTOURS AND SLOPES. SPOT ELEVATIONS SHALL BE USED FOR SETTING ELEVATIONS OF CURB AND GUTTER AND UTILITIES.															
23.	IF GRADE ADJUSTMENTS ARE REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO INVESTIGATE SUCH ADJUSTMENTS.															
24.	GRADES SHOWN AT ALL ENTRANCES ARE DESIGN GRADES. CONTRACTOR SHALL COORDINATE GRADING IN THESE AREAS WITH EXISTING FEATURES IN THE FIELD AND/OR CURRENT DESIGN DRAWINGS.															
25.	CONTRACTOR SHALL EXTEND UNDERGROUND ROOF DRAINAGE PIPING TO NEAREST CATCH BASIN.															
26.	ALL ROADS SHALL HAVE A MINIMUM 1 FOOT SHOULDER WIDTH.															
27.	ALL REINFORCED CONCRETE PIPE (RCP) SHALL BE CLASS III, UNLESS NOTED ON DRAWINGS WITH BELL & SPIGOT ENDS AND SHALL CONFORM TO ALL REQUIREMENTS OF ASTM C 76, LATEST EDITION, INSTALLED WITH FLEXIBLE PLASTIC (BITUMEN) GASKETS AT ALL JOINTS. GASKETS SHALL COMPLY WITH AASHTO M_198 751, TYPE B, AND SHALL BE INSTALLED IN STRICT ACCORDANCE WITH PIPE MANUFACTURER'S RECOMMENDATIONS.															
28.	ALL CORRUGATED PLASTIC PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M_294, TYPE S, SHALL BE SMOOTH INTERIOR WITH ANNULAR CORRUGATED EXTERIOR. HI-Q SURE-LOK 10.8 PIPE, ADS, N-12, OR APPROVED EQUAL. ALL JOINTS SHALL BE BELL AND SPIGOT AND SHALL MEET THE REQUIREMENTS OF AASHTO M-294 SHALL BE WATERTIGHT, MEETING THE REQUIREMENTS OF ASTM D 3212. THE GASKETS SHALL BE MADE OF POLYISOPRENE MEETING THE REQUIREMENTS OF ASTM F 477. INSTALLATION SHALL CONFORM TO AASHTO M-294, ASTM D-2321, AND MANUFACTURERS INSTALLATION PROCEDURES. MAX COVER IS 15 FEET.															
29.	ANY REINFORCED CONCRETE PIPE WITH MORE THAN 15 FEET OF COVER SHALL BE CLASS IV WITH O-RING JOINTS.															
30.	ALL STORM PIPE LENGTH AND ELEVATIONS (TOPS AND INVERTS) OF STORM DRAINAGE STRUCTURES SHOWN ON THE DRAWINGS ARE APPROXIMATE. CONTRACTOR MAY HAVE TO FIELD ADJUST AS NECESSARY DURING CONSTRUCTION. THE CONTRACTOR MAY USE PRE-CAST DRAINAGE STRUCTURES AS AN ALTERNATE FOR STRUCTURE SPECIFIED ON THE PLAN. HOWEVER, THE OWNER ASSUMES NO RESPONSIBILITY FOR THESE STRUCTURES, AS FIELD CONDITIONS DURING CONSTRUCTION OFTEN DICTATE ADJUSTMENTS OF STORM DRAINAGE STRUCTURES. THE CONTRACTOR RETAINS ALL RESPONSIBILITY AND EXPENSE FOR MODIFYING THE PRE-CAST STRUCTURES TO ACCOMMODATE THESE ADJUSTMENTS.															
31.	ANY REINFORCED CONCRETE PIPE STEEPER THAN 10 PERCENT MUST HAVE CONCRETE COLLARS. CORRUGATED METAL PIPE WITH HUGGER BANDS MAY BE SUBSTITUTED. THE NUMBER OF CONCRETE COLLARS AND TYPE OF STORM PIPE WILL BE DETERMINED TOGETHER BY THE CONTRACTOR AND THE ENGINEER.															
32.	ALL CORRUGATED STEEL PIPE SHALL BE TYPE 2, ALUMINIZED STEEL PIPE, MEETING AASHTO M-274, 16 GAUGE FOR SIZES 24" AND SMALLER AND 14 GAUGE FOR SIZES 30" AND LARGER. ALL CONNECTIONS SHALL BE HUGGER BAND WITH O-RING GASKETS.															
33.	ALL SANITARY SEWER WORK SHALL BE CONSTRUCTED TO LINES AND GRADES SHOWN AND AS DETAILED ON THE DRAWINGS. ALL MANHOLE/CLEANOUT TOP ELEVATIONS ON CIVIL DRAWINGS ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL MANHOLE/CLEANOUT TOPS ARE FLUSH WITH PAVEMENT THROUGHOUT THE PROJECT.															
34.	THE CONTRACTOR SHALL PROVIDE STANDARD CLEAN-OUTS OR MANHOLES AT ALL BENDS AND CHANGES IN GRADE IN SEWER LINES AND CONNECTIONS TO EXISTING SEWER LINES. PIPE BEDDING AND BACKFILL SHALL BE CAREFULLY CONTROLLED. ALL SANITARY SEWER WORK SHALL COMPLY WITH LOCAL CODES AND ORDINANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING WITH THE LOCAL AND STATE SEWER APPROVAL AUTHORITIES TO INSURE THAT ALL MATERIALS, INSTALLATION, TESTING, AND AS-BUILT DRAWING REQUIREMENTS WILL BE TO THE SATISFACTION OF THE LOCAL AND STATE AUTHORITIES.															
35.	ALL UTILITY TRENCHES SHALL BE THOROUGHLY COMPACTED AND TESTED TO PREVENT SETTLEMENT AND DAMAGE TO FUTURE PAVEMENT AND STRUCTURES.															
36.	ASPHALT PAVING SHALL BE CONSTRUCTED ON A PREPARED AND WELL-DRAINED SUBGRADE COMPACTED AS SPECIFIED. THE BASE COURSE SHALL BE CONSTRUCTED WITH 8" GRADED AGGREGATE. THE BINDER COURSE SHALL BE CONSTRUCTED WITH 2" COMPACTED THICKNESS ASPHALT CONCRETE. THE SURFACE COURSE (COMPLETED THROUGH SEPARATE CONTRACT) SHALL BE CONSTRUCTED WITH 2" COMPACTED THICKNESS ASPHALT CONCRETE. ALL PAVING WORK (MATERIALS AND CONSTRUCTION) SHALL COMPLY WITH STATE SPECIFICATIONS.															
37.	CONCRETE SIDEWALKS SHALL BE CONSTRUCTED WITH 3,000 PSI CONCRETE, 4" THICK NON-REINFORCED WITH JOINTS AS SHOWN ON DETAILS. THERE SHALL BE CONTROL JOINTS INSTALLED EVERY 5 FEET ALONG SIDEWALK.															
38.	ALL AREAS NOT COVERED BY CONCRETE AND PAVEMENT SHALL RECEIVE TOPSOIL AND BE GRASSED IN ACCORDANCE WITH SPECIFICATIONS.															
39.	SCDOT CONCRETE CURB AND GUTTER SHALL BE 18" WIDE WITH 6" CURB CONSTRUCTED WITH 3,000 PSI CONCRETE WITH EXPANSION JOINTS AND CONTRACTION JOINTS INSTALLED TO COMPLY WITH SCDOT STANDARD SPECIFICATION FOR MATERIALS CONSTRUCTION OF CURB AND GUTTER.															
40.	THE GRADING CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM BUILDINGS AT ALL TIMES. CONTRACTOR SHALL BRING TO THE ATTENTION OF THE ENGINEER ANY AREAS THAT MAY NOT DRAIN PROPERLY DURING CONSTRUCTION.															
41.	CONTRACTOR SHALL INCLUDE IN COST ALL WETTING/DRYING OF SOILS NECESSARY TO ACHIEVE COMPACTION PER SPECIFICATIONS.															
42.	THE SEQUENCE OF WORK SHALL CONFORM TO THE EROSION CONTROL NARRATIVE.															
43.	THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE WHEN INSTRUCTIONS FROM REGULATORY AGENCIES ARE RECEIVED AND COMPLY WITH INSTRUCTIONS AS DIRECTED BY THE OWNER'S REPRESENTATIVE.															
44.	THE CONTRACTOR SHALL CAREFULLY STUDY AND COMPARE THE CONSTRUCTION DOCUMENTS AND SHALL AT ONCE REPORT TO THE ENGINEER ANY INCONSISTENCIES OR OMISSIONS DISCOVERED. THE CONTRACTOR SHALL TAKE FIELD MEASUREMENTS TO VERIFY THAT ALL LOCATIONS ARE CORRECT PRIOR TO COMMENCING CONSTRUCTION.															
45.	THE CONTRACTOR SHALL NOT PERFORM ANY WORK ON ANY UTILITIES OR IN ANY PUBLIC RIGHT-OF-WAY UNTIL HE HAS OBTAINED COPIES OF ALL NECESSARY ENCROACHMENT AND CONSTRUCTION PERMITS.															
46.	ROCK EXCAVATION SHALL BE CLASSIFIED AS FOLLOWS: a. MASSIVE ROCK EXCAVATION - ANY MATERIAL WHICH CANNOT BE EXCAVATED WITH A SINGLE TOOTH RIPPER DRAWN BY A CRAWLER TRACTOR HAVING A MINIMUM DRAW BAR RATED AT NOT LESS THAN 53,000 POUNDS (CATERPILLAR D-8 OR EQUIVALENT) AND OCCUPYING AN ORIGINAL VOLUME OF AT LEAST ONE CUBIC YARD OR MORE  b. TRENCH EXCAVATION - MATERIAL WHICH CANNOT BE EXCAVATED WITH A POWER SHOVEL HAVING THE CAPACITY OF AT LEAST THAT OF A CATERPILLAR 225 AND OCCUPYING AN ORIGINAL VOLUME OF AT LEAST ½ CUBIC YARD OR MORE.															
47.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATING ANY EXISTING UTILITIES NECESSARY FOR SITE CONSTRUCTION INCLUDING ALL PERMITS AND FEES.															
48.	THE CONTRACTOR SHALL VERIFY BENCH MARK LOCATION AND ELEVATION WITH SURVEYOR BEFORE BEGINNING CONSTRUCTION.															
49.	THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EASEMENTS ON THE SITE BEFORE PROCEEDING WITH CONSTRUCTION.															
50.	IN THE CASE OF A CONFLICT IN SPECIFICATIONS, NOTES, PLANS, OR DETAILS, THE STRICTER SHALL GOVERN.															
51.	THE GEOTECHNICAL REPORT WAS PREPARED BY AN INDEPENDENT TESTING COMPANY AND IS INCLUDED IN THE DOCUMENTS FOR INFORMATION ONLY. NEITHER THE OWNER NOR THE ENGINEER WARRANTS THE INFORMATION CONTAINED IN THE SUBSURFACE EXPLORATION REPORT. BEFORE SUBMITTING HIS BID, THE CONTRACTOR SHALL MAKE HIS OWN INDEPENDENT SUBSURFACE INSPECTION AND EVALUATION. THE CONTRACTOR'S OWN PITS, SUBSURFACE DRAINAGE, AND UNDERCUTTING IF REQUIRED. THE SOILS ENGINEER SHALL APPROVE ALL MEANS AND METHODS OF CONSTRUCTION RELATED TO SITEWORK ON THIS PROJECT. THE CONTRACTOR SHALL CONTACT THE SOILS ENGINEER BEFORE SUBMITTING HIS BID AND OBTAIN APPROVAL OF HIS MEANS AND METHODS OF CONSTRUCTION.															
52.	ALL SITES NOT REQUIRED FOR ACTUAL CONSTRUCTION SHOULD BE PRESERVED IN EXISTING CONDITION. ANY AREAS UTILIZED BY THE CONTRACTOR FOR STORAGE, PARKING, ETC. SHOULD HAVE ADVANCE WRITTEN APPROVAL FROM THE ENGINEER AND/OR OWNER OF PROPERTY AND SHALL BE THOROUGHLY RESTORED AT NO EXPENSE TO THE CITY IN THE MANNER PROVIDED IN THE CONTRACT FOR SEEDING, FERTILIZING, AND MULCHING.															
53.	ALL CHANGES INVOLVING INCREASED COST TO THE PRODUCT MUST BE SPECIFICALLY AUTHORIZED BY THE CITY ENGINEER.															
54.	A LIST OF KNOWN OWNERS OF UTILITIES ON THE PROJECT ARE LISTED BELOW. ALL UTILITY COMPANIES HAVE OFFICES IN GREENVILLE, SC. <table><tr><td>UTILITY</td><td>OWNER</td></tr><tr><td>CABLE</td><td>CHARTER COMMUNICATIONS</td></tr><tr><td>ELECTRIC</td><td>DUKE ENERGY</td></tr><tr><td>GAS</td><td>PIEDMONT NATURAL GAS</td></tr><tr><td>SANITARY SEWER</td><td>CITY OF GREENVILLE</td></tr><tr><td>TELEPHONE</td><td>AT&amp;T</td></tr><tr><td>WATER</td><td>GREENVILLE WATER SYSTEM</td></tr></table>	UTILITY	OWNER	CABLE	CHARTER COMMUNICATIONS	ELECTRIC	DUKE ENERGY	GAS	PIEDMONT NATURAL GAS	SANITARY SEWER	CITY OF GREENVILLE	TELEPHONE	AT&T	WATER	GREENVILLE WATER SYSTEM	
UTILITY	OWNER															
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GAS	PIEDMONT NATURAL GAS															
SANITARY SEWER	CITY OF GREENVILLE															
TELEPHONE	AT&T															
WATER	GREENVILLE WATER SYSTEM															
55.	THE EXTENT OF CLEARING AND GRUBBING SHALL BE TO THE CONSTRUCTION LIMITS, EXCEPT AS DIRECTED BY THE ENGINEER.															
56.	THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN AND VEHICULAR TRAFFIC AT ALL TIMES. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION ON TRAFFIC CONTROL. THE CONTRACTOR SHALL COMPLY WITH THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION (SCDOT) TRAFFIC CONTROL MEASURES AS ADDRESSED IN THE M.U.T.C.D., 2000 MILLENIUM EDITION.															
57.	QUANTITIES SHOWN ON THE PLANS ARE BASED ON EXISTING FIELD CONDITIONS AT THE TIME OF PLAN AND PREPARATION AND ARE TO BE USED FOR THE PREPARATION OF PROPOSALS. AS DETERMINED BY THE ENGINEER, QUANTITIES MAY CHANGE BASED UPON CONDITIONS UNCOVERED AT THE TIME OF CONSTRUCTION.															
58.	CONSTRUCTION OF DRIVEWAYS AND DRIVEWAY TIES: UNLESS OTHERWISE DIRECTED IN THE PLANS, THE CONTRACTOR SHALL CONSTRUCT EACH DRIVEWAY PER THE CITY OF GREENVILLE'S DRIVEWAY STANDARD, AS SHOWN IN THE STANDARD DETAILS. AREAS FOR DRIVEWAY TIE-INS ARE MEASURED FROM THE BACK OF CONCRETE DRIVEWAY APRON TO THE LIMITS OF CONSTRUCTION, AS SHOWN IN THE PLANS AND CROSS-SECTIONS. CONTRACTOR SHALL REFER TO THE STANDARD DETAILS FOR DRIVEWAY TIE-INS. DRIVEWAYS SHALL BE MAINTAINED AND KEPT IN USE AT ALL TIMES.															



GREENVILLE, S.C.  
P.O. BOX 2207

WVG STREETSCAPE PHASE IV	PROJECT NO. PW0444	REVISION	DATE	BY/CHKD
CITY OF GREENVILLE	DATE 5/24/2016			
GREENVILLE, S.C.	DRAWN BY NO			
GENERAL NOTES	CHECKED BY CL			

DRAWING NO.  
**2**

- THE CITY OF GREENVILLE CONSTRUCTION INSPECTION BUREAU SHALL BE NOTIFIED BY THE PERMIT HOLDER AT (864) 467-8890 A MINIMUM OF 72 HOURS PRIOR TO BEGINNING CONSTRUCTION. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES.
- SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSTALLED AND FUNCTIONING PRIOR TO BEGINNING ANY PROJECT EARTH DISTURBING ACTIVITIES.
- ALL SEDIMENT AND EROSION CONTROLS SHALL BE INSPECTED UNTIL CONSTRUCTION IS COMPLETE, THE SITE IS PERMANENTLY STABILIZED, AND THE NOTICE OF TERMINATION (NOT) IS FILED WITH SCDHEC.
- ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS PERMANENTLY STABILIZED.
- ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY SEVEN (7) CALENDAR DAYS. DAMAGED, INEFFECTIVE OR INCORRECTLY INSTALLED DEVICES SHALL BE REPAIRED OR REPLACED, AS NECESSARY, WITHIN 48 HOURS OF IDENTIFICATION.
- ALL INSPECTION RECORDS SHALL BE DOCUMENTED IN WRITTEN FORM AND CATALOGUED IN A RECORD KEEPING BINDER FOR THE PROJECT (SWPPP BOOK). THE CITY MAY REQUIRE ELECTRONIC SUBMISSION OF WEEKLY INSPECTION RECORDS.
- A RAIN GAUGE SHALL BE INSTALLED AT THE PROJECT AREA, AND CUMULATIVE PRECIPITATION DEPTH SHALL BE RECORDED WITH WEEKLY INSPECTION DOCUMENTATION. ALL RAINFALL EVENTS 0.5" AND GREATER, AS RECORDED ONSITE OR BY A WEATHER STATION IN REASONABLE PROXIMITY TO THE PROJECT, SHALL ALSO BE DOCUMENTED WITH THE WEEKLY INSPECTION REPORTS.
- ALL EROSION PREVENTION AND SEDIMENT CONTROL PLANS AND INSPECTION DOCUMENTATION (E.G. SWPPP BOOK, CERTIFICATION STATEMENTS, INSPECTION RECORDS, MAINTENANCE RECORDS, AND RAINFALL DATA) SHALL BE RETAINED AT THE CONSTRUCTION SITE OR, IF APPROVED BY THE CITY, AT A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED. ALL PLANS AND DOCUMENTS SHALL BE UPDATED AS REQUIRED PER SC NPDES GENERAL PERMIT SCR100000.
- IF EXISTING BMP'S NEED TO BE MODIFIED OR IF ADDITIONAL BMP'S ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SC'S WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMP'S MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE.
- STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW:
  - WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
  - WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
- THE SITE SHALL BE CONSIDERED PERMANENTLY STABILIZED WHEN ALL SURFACE DISTURBING ACTIVITIES ARE COMPLETE AND EITHER OF THE TWO FOLLOWING CRITERIA IS MET:
  - A UNIFORM (E.G. EVENLY DISTURBED, WITHOUT LARGE BARE AREAS) PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70% OF THE NATIVE BACKGROUND VEGETATIVE COVER FOR THE AREA HAS BEEN ESTABLISHED ON ALL UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES, OR
  - EQUIVALENT PERMANENT STABILIZATION MEASURES (SUCH AS RIP RAP, GABIONS, OR GEOTEXTILES) HAVE BEEN EMPLOYED.

1. AREAS TO BE GRASSED SHALL BE DEFINED AS ALL AREAS OF SITE WITHIN THE GRADING LIMITS AND NOT OCCUPIED BY PAVING, CRUSHED STONE SURFACING OR STRUCTURES. GRASSING SHALL INCLUDE FINAL SHAPING, LIMING, FERTILIZING AND SEEDING.
2. LIME SHALL BE AGRICULTURAL GRADE, GROUND LIMESTONE. GROUND LIMESTONE SHALL CONTAIN NOT LESS THAN 88% OF CALCIUM CARBONATE CONTENT EQUIVALENT AND SHALL BE SUCH A FINENESS THAT 90% WILL PASS THROUGH A NO. 10 SIEVE AND NOT LESS THAN 50% THROUGH A NO. 50 SIEVE.
3. FERTILIZER SHALL BE GRADE 10-10-10 COMPLETE FERTILIZER OF UNIFORM COMPOSITION, FREE-FLOWING AND SUITABLE FOR APPLICATION WITH EQUIPMENT, DELIVERED TO SITE IN BAGS LABELED WITH MANUFACTURER'S GUARANTEED ANALYSIS, AND SHALL CONFORM TO ALL STATE AND FEDERAL REGULATIONS.
4. SEEDS SHALL BE MIXTURE AS APPROVED BY TE ENGINEER AND SHALL MEET REQUIREMENTS OF SEED LAWS OF THE STATE AND THE U.S. DEPARTMENT OF AGRICULTURE RULES AND REGULATIONS UNDER FEDERAL SEED ACT IN EFFECT ON DATE BIDS ARE RECEIVED. SEED SHALL BE DELIVERED IN STANDARD CONTAINERS. SEED WHICH HAS BECOME WET, MOLDY OR DAMAGED IN TRANSIT OR STORAGE WILL NOT BE ACCEPTABLE.
5. MULCH SHALL CONSIST OF SMALL GRAIN STRAW OF GOOD QUALITY, CLEAN, FREE OF NOXIOUS WEEDS, AND REASONABLY FREE OF OTHER WEEDS. SPREAD MULCH AT A RATE OF 1 TON PER ACRE ON SLOPES UP TO 8.0% AND AT A RATE OF 1-1/2 TONS PER ACRE FROM 8.0% UP TO A SLOPE OF 15%.
6. SPREAD LIME AT A RATE OF 3,000 LBS PER ACRE.
7. FERTILIZER SHALL BE DISTRIBUTED UNIFORMLY AT A RATE OF 1,000 LBS PER ACRE AND SHALL BE INCORPORATED INTO SOIL TO A DEPTH OF AT LEAST 2" BY DISKING AND HARROWING.
8. SPREAD SEED AT A RATE IN ACCORDANCE WITH THE SOUTH CAROLINA HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.
9. IMMEDIATELY AFTER FERTILIZING AND SEEDING HAVE BEEN COMPLETED, ENTIRE AREA SHALL BE COMPACTED BY MEANS OF A CULTIPACKER, ROLLER, OR APPROVED EQUIPMENT WEIGHING APPROXIMATELY 90 LBS PER LINEAR FOOT OR ROLLER. USE OF SPECIFIED MULCH, APPLIED AT A RATE OF 1-2 TONS/ACRE (USE OF HIGHER RATE FOR 3 TO 1 SLOPES OR GREATER), WITH ASPHALT EMULSION TYPE SS-1, MS-2, RS-1, OR RS-2, SHALL BE USED TO PROTECT SITE AGAINST EROSION.
10. AREAS THAT REQUIRE RE-FERTILIZATION AND/OR RE-SEEDING WILL BE DESIGNATED BY THE ENGINEER. WHEN ANY PORTION OF SURFACE BECOMES GULLED OR OTHERWISE DAMAGED FOLLOWING SEEDING, OR SEEDLINGS HAVE BEEN WINTER-KILLED OR OTHERWISE DESTROYED, AFFECTED PORTION SHALL BE REPAIRED TO RE-ESTABLISH CONDITION AND GRADE OF SOIL PRIOR TO SEEDLING AND SHALL BE RE-SEEDED AS SPECIFIED ABOVE.
11. ALL DISTURBED AREAS ARE TO BE GRASSED IMMEDIATELY AFTER CONSTRUCTION IN THE AREA. AT NO TIME WILL AN AREA BE LEFT BARE FOR MORE THAN 14 DAYS AFTER COMPLETION OF CONSTRUCTION.

A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED AND MAINTAINED ON THE PROJECT SITE. STORM WATER INLET PROTECTION SHALL BE PROVIDED FOR ALL INLETS (UPSTREAM AND DOWNSTREAM) WITHIN 50 FT OF THE CONSTRUCTION ENTRANCE OR DISTURBANCE (ON BOTH SIDES OF THE PUBLIC ROADWAY).

13. ALL EXISTING AND NEW STORM WATER STRUCTURES, AFFECTED BY THIS PROJECT, SHALL BE INSPECTED AND MAINTAINED CLEAN OF ACCUMULATED DEMOLITION DEBRIS OR SEDIMENTS.

14. DISPOSAL OF ALL RECOVERED SEDIMENTS AND CONSTRUCTION DEBRIS SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CITY, STATE, AND FEDERAL REGULATIONS. NO SEDIMENT OR CONSTRUCTION DEBRIS SHALL BE FLUSHED DOWN THE STORMWATER SYSTEM.

15. DURING THE COURSE OF CONSTRUCTION ACTIVITIES, EROSION AND SEDIMENT CONTROLS SHALL BE USED TO PREVENT TRACKING OF MUD AND/OR SEDIMENT ACCUMULATION ON PUBLIC ROADWAYS (INCLUDING STREET GUTTERS), SEDIMENT LADEN RUNOFF FROM ENTERING INTO EXISTING STORM WATER SYSTEM INLETS OR DEPOSITING ON ADJACENT PROPERTIES, AND AIRBORNE DUST MIGRATION OFF-SITE. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, BY SWEEPING OR VACUUMING, AS MAY BE REQUIRED.

16. TO SECURE THE PROJECT SITE, LOCATE LIMITS OF CONSTRUCTION, PROTECT AREAS THAT ARE TO REMAIN UNDISTURBED AND PREVENT MIGRATION OF CONSTRUCTION DEBRIS, ORANGE CONSTRUCTION FENCING SHALL BE INSTALLED AROUND AREAS NOT REQUIRING SILT FENCING. ANY ACCUMULATION OF CONSTRUCTION DEBRIS ON PUBLIC ROADWAYS OR ADJACENT PROPERTIES SHALL BE REMOVED WITHIN 24 HOURS. CARE SHALL BE TAKEN WHEN INSTALLING CONSTRUCTION FENCING TO NOT OBSCURE ONCOMING TRAFFIC AT INTERSECTIONS, ADJACENT DRIVEWAYS AND THE PROJECT CONSTRUCTION ENTRANCE.

17. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED AND STABILIZED IMMEDIATELY AFTER THE UTILITY INSTALLATION.

18. SILT FENCE SHALL BE INSTALLED ALONG LINES OF EQUAL ELEVATION. SILT FENCING SHALL BE INSTALLED NO CLOSER THAN 5 FEET DOWNHILL FROM THE TOE OF ANY SLOPE.

19. ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. ALL WOS SHALL BE CLEARLY DELINEATED ON THE EROSION PREVENTION AND SEDIMENT CONTROL PLANS.

20. PROJECT SETBACK BUFFERS SHALL BE LOCATED A MINIMUM OF 30 FT. MEASURED FROM THE TOP OF STREAM BANK OR EDGE OF WETLAND, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. ALL SETBACKS SHALL BE CLEARLY DELINEATED ON THE EROSION PREVENTION AND SEDIMENT CONTROL PLANS.

21. A SINGLE ROW OF SILT FENCING SHALL BE INSTALLED ALONG ALL SETBACK BUFFERS THAT MEET THE MINIMUM REQUIREMENTS.

22. A DOUBLE ROW OF SILT FENCING SHALL BE INSTALLED IN ALL AREAS WHERE A MINIMUM SETBACK BUFFER CANNOT BE MAINTAINED BETWEEN THE DISTURBED AREA AND THE WATER BODY OR WETLAND. DOUBLE ROW OF SILT FENCING SHALL BE PLACED NO CLOSER THAN 5 FT DOWNHILL FROM THE TOE OF ANY FILL AREA AND A MINIMUM OF 5 FT SPACING SHALL BE MAINTAINED BETWEEN SILT FENCE ROWS. A MINIMUM 5 FT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WATER BODIES AND WETLANDS.

23. STOCKPILES OF USEABLE OR WASTE MATERIALS SHALL BE SURROUNDED BY A ROW OF SILT FENCE AT ALL TIMES. STOCKPILES THAT ARE UNDISTURBED FOR MORE THAN FOURTEEN (14) DAYS SHALL HAVE APPROPRIATE STABILIZATION MEASURES INSTALLED. STOCKPILES SHALL BE PLACED A MINIMUM OF 50 FEET AWAY FROM STORM WATER FLOWS, STORMWATER INLET STRUCTURES, DRAINAGE COURSES, ADJACENT PROPERTY AND PUBLIC ROADWAYS.

24. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER), AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORMWATER DISCHARGES.

25. TEMPORARY DIVERSION BERMS, DITCHES, OR SLOPE DRAINS SHALL BE PROVIDED FOR ALL SLOPES 3:1 OR STEEPER AND AS OTHERWISE NEEDED DURING CONSTRUCTION TO PROTECT AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.

26. SLOPES 3:1 OR STEEPER AND/OR EXCEEDING EIGHT (8) VERTICAL FEET SHALL BE STABILIZED WITH STAKED IN PLACE SOD OR SYNTHETIC/VEGETATIVE MATS IN ADDITION TO HYDRO SEEDING AS SOON AS PRACTICAL BUT NOT MORE THAN 7 CALENDAR DAYS AFTER LAND DISTURBING ACTIVITIES ON THE SLOPE HAVE PERMANENTLY OR TEMPORARILY CEASED.

27. CAT RACK OR SURFACE ROUGHENING IS REQUIRED FOR AL SLOPES 3:1 OR STEEPER PRIOR TO SEEDING AND LYING OF SYNTHETIC OR VEGETATIVE MATS. CAT TRACKING OR SURFACE ROUGHENING SHALL PRODUCE A SURFACE WITH FURROWS RUNNING CROSS SLOPE, PARALLEL WITH SLOPE CONTOURS, AND PERPENDICULAR TO SURFACE RUNOFF.

28. PORTABLE TOILET FACILITIES SHALL NOT BE LOCATED WITHIN 20 FEET OF ANY STORM WATER STRUCTURE AND/OR 50 FEET OF ANY WATER COURSE, WETLAND AREA, STREAM, FLOODPLAIN, OR LAKE.

29. THE FOLLOWING DISCHARGES ARE PROHIBITED:

A. WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL

B. WASTEWATER FROM WASHOUT AND CLEANOUTS OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS, AND OTHER CONSTRUCTION MATERIALS.

C. FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE

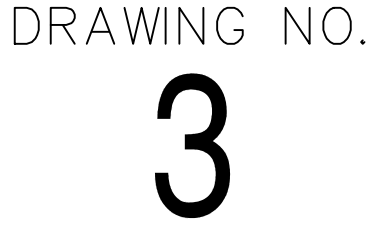
D. SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING DURING CONSTRUCTION

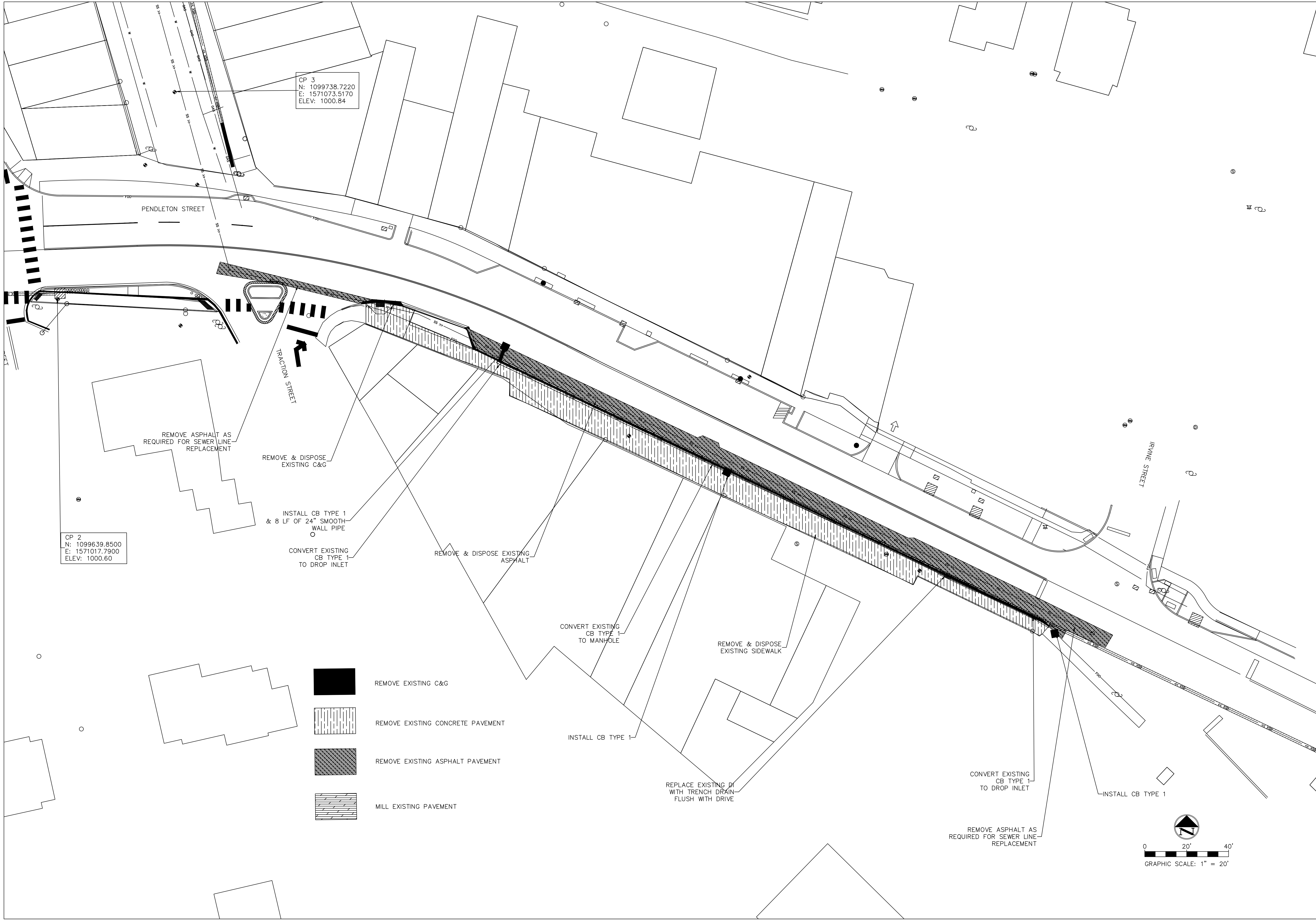
30. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT TREATMENT PRIOR TO DISCHARGE.

31. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMP'S (SEDIMENT BASIN, FILTER BAG, ETC.).

32. RESIDENTIAL SUBDIVISIONS REQUIRE EROSION CONTROL FEATURES FOR INFRASTRUCTURE AS WELL AS FOR INDIVIDUAL LOT CONSTRUCTION. INDIVIDUAL PROPERTY OWNERS SHALL FOLLOW THESE PLANS DURING CONSTRUCTION OR PROVIDE AN INDIVIDUAL PLAN IN ACCORDANCE WITH S.C. REG 72-3000 ET. SEQ. AND SCR100000.

33. PROPERLY SIGNED AND SEALED AS-BUILT DRAWINGS OF THE STORMWATER PLAN AND A SIGNED AND SEALED DETENTION BASIN AS-BUILT SHALL BE SUBMITTED TO THE CITY WITHIN 30 DAYS OF THE PERMANENT STABILIZATION AND PRIOR TO ISSUANCE OF PROJECT ACCEPTANCE BY THE CITY.





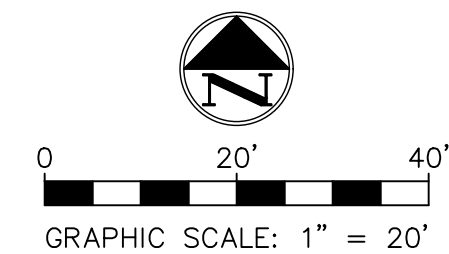
*THE CITY OF*  
**GREENVILLE**  
P.O. BOX 2207  
GREENVILLE, S.C.

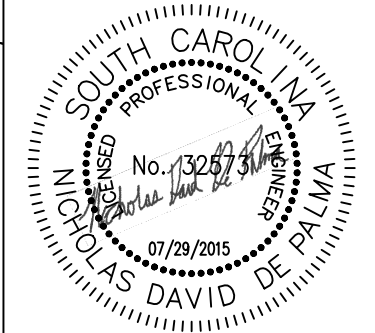
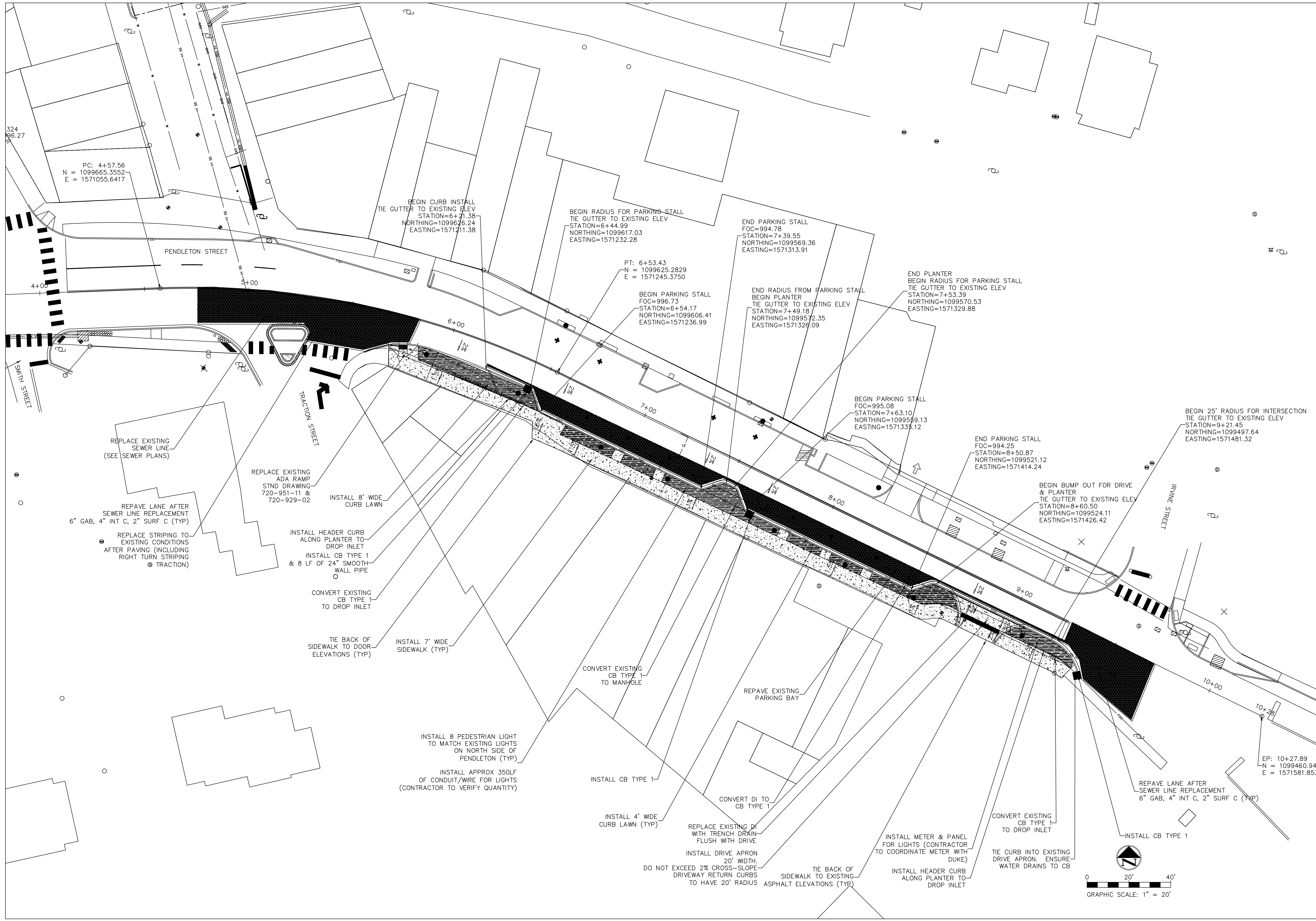
PROJECT NO.	DATE	DRAWN BY	CHECKED BY
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REVISION	No.	DATE	BY/CHKD

VWG STREETScape PHASE 6  
CITY OF GREENVILLE  
GREENVILLE, S.C.

DEMO PLAN

DRAWING NO.  
**4**





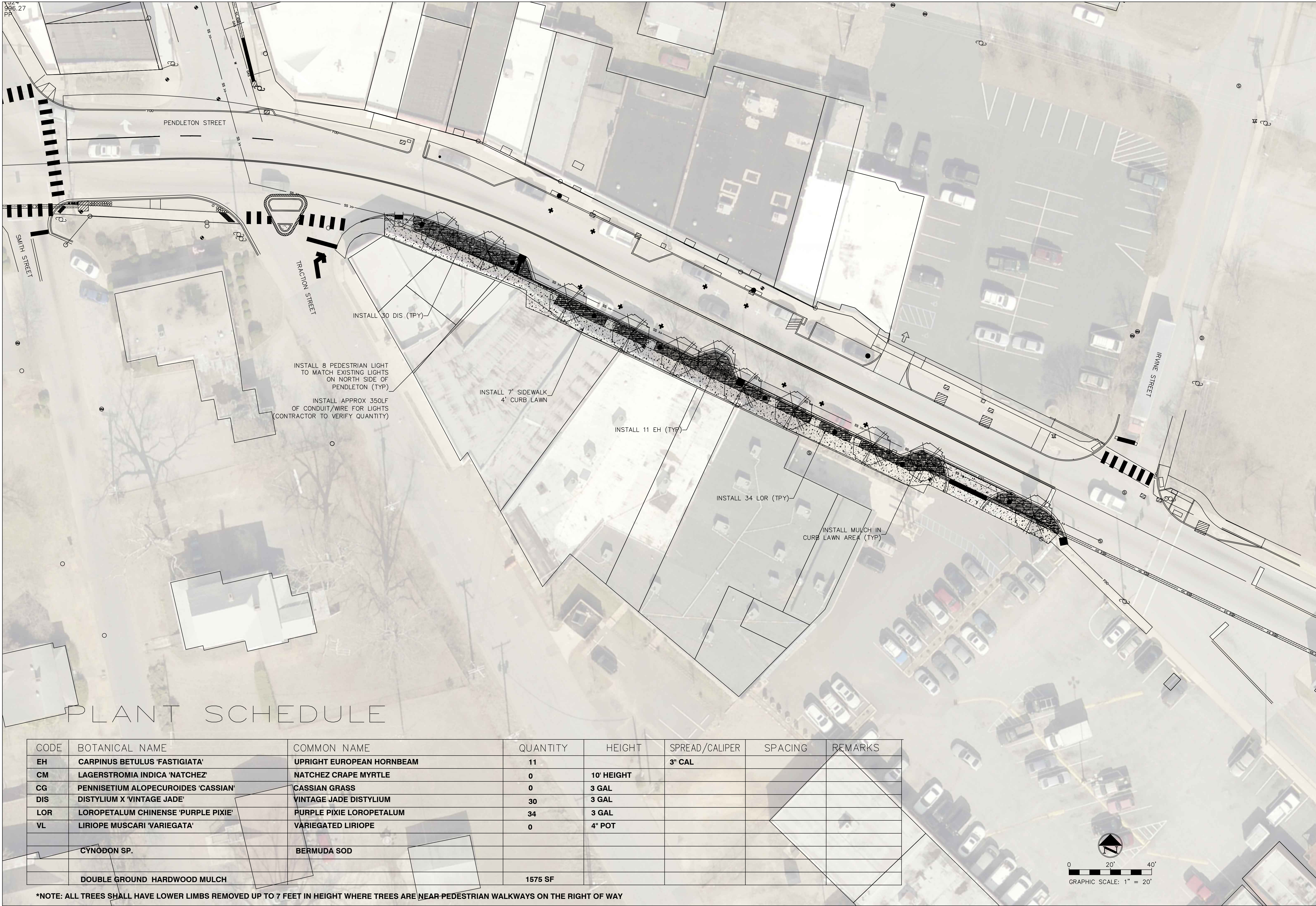
THE CITY OF  
GREENVILLE

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WMG STREETScape PHASE 6  
CITY OF GREENVILLE  
GREENVILLE, S.C.  
SITE PLAN

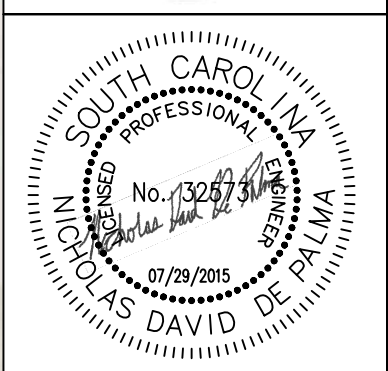

DRAWING NO.  
5



PLANT SCHEDULE

CODE	BOTANICAL NAME	COMMON NAME	QUANTITY	HEIGHT	SPREAD/CALIPER	SPACING	REMARKS
EH	CARPINUS BETULUS 'FASTIGIATA'	UPRIGHT EUROPEAN HORNBEAM	11		3" CAL		
CM	LAGERSTROMIA INDICA 'NATCHEZ'	NATCHEZ CRAPE MYRTLE	0	10' HEIGHT			
CG	PENNISETIUM ALOPECUROIDES 'CASSIAN'	CASSIAN GRASS	0	3 GAL			
DIS	DISTYLIIUM X 'VINTAGE JADE'	VINTAGE JADE DISTYLIIUM	30	3 GAL			
LOR	LOROPETALUM CHINENSE 'PURPLE PIXIE'	PURPLE PIXIE LOROPETALUM	34	3 GAL			
VL	LIRIOPE MUSCARI 'VARIEGATA'	VARIEGATED LIRIOPE	0	4" POT			
	CYNODON SP.	BERMUDA SOD					
	DOUBLE GROUND HARDWOOD MULCH		1575 SF				

\*NOTE: ALL TREES SHALL HAVE LOWER LIMBS REMOVED UP TO 7 FEET IN HEIGHT WHERE TREES ARE NEAR PEDESTRIAN WALKWAYS ON THE RIGHT OF WAY



*THE CITY OF*  
**GREENVILLE**

GREENVILLE, S.C.  
P.O. BOX 2207

PROJECT NO.	REVISION	DATE	BY/CHKD
EDXXXX			

**WVG STREETScape PHASE 6**

**CITY OF GREENVILLE**

GREENVILLE, S.C.

**LANDSCAPE PLAN**

DRAWING NO.

**6**

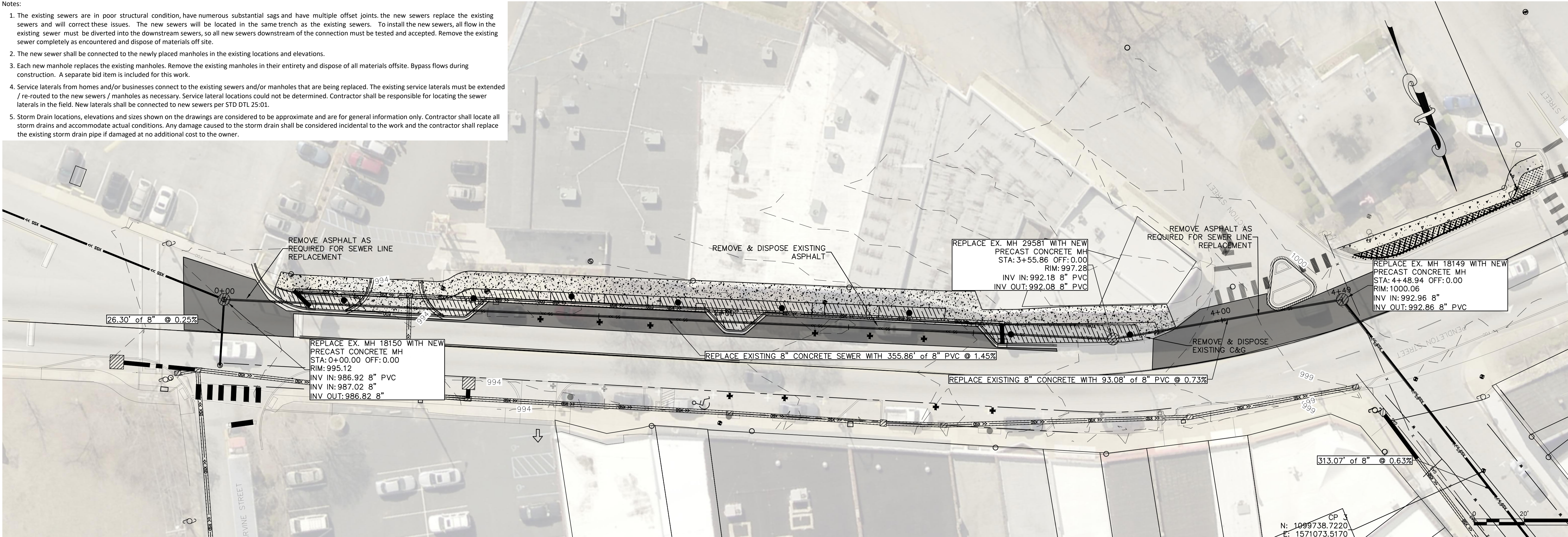
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DATE 4/12/19

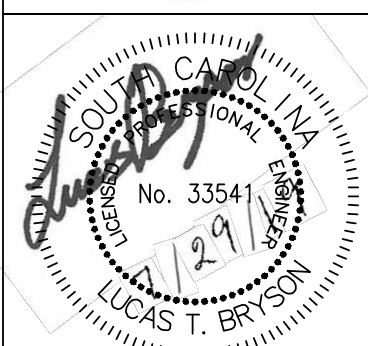
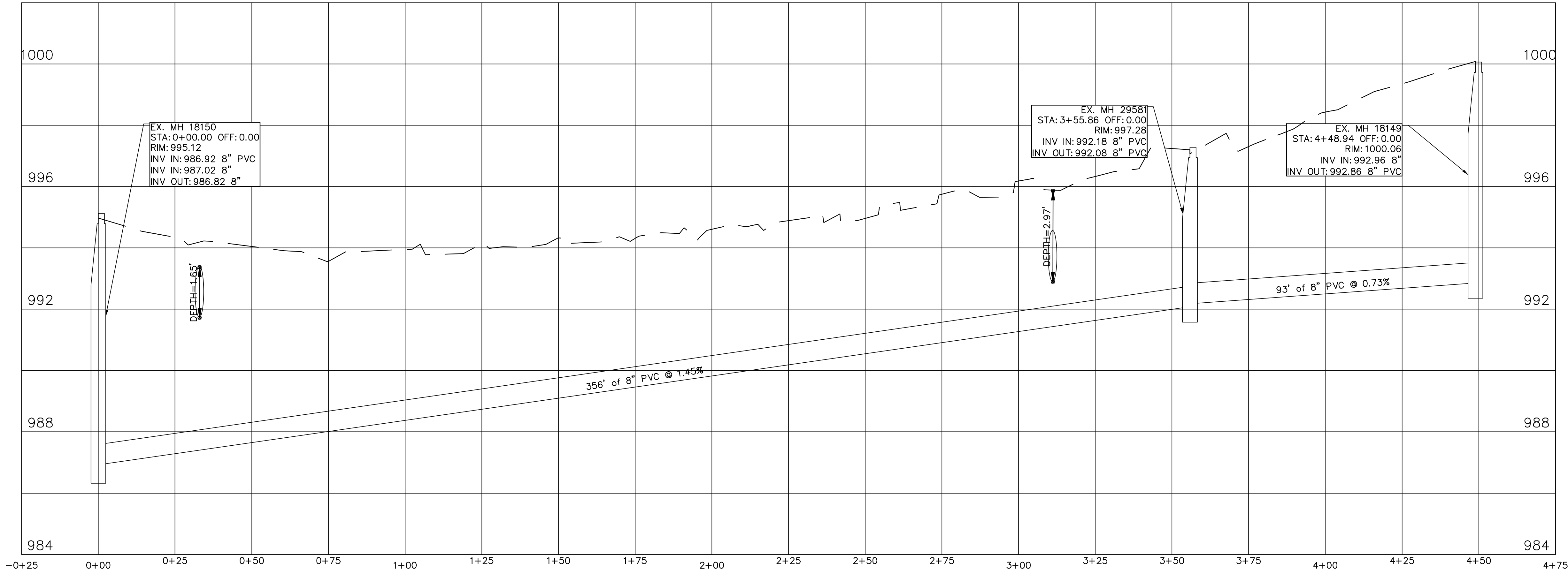
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- Notes:
1. The existing sewers are in poor structural condition, have numerous substantial sags and have multiple offset joints. the new sewers replace the existing sewers and will correct these issues. The new sewers will be located in the same trench as the existing sewers. To install the new sewers, all flow in the existing sewer must be diverted into the downstream sewers, so all new sewers downstream of the connection must be tested and accepted. Remove the existing sewer completely as encountered and dispose of materials off site.
  2. The new sewer shall be connected to the newly placed manholes in the existing locations and elevations.
  3. Each new manhole replaces the existing manholes. Remove the existing manholes in their entirety and dispose of all materials offsite. Bypass flows during construction. A separate bid item is included for this work.
  4. Service laterals from homes and/or businesses connect to the existing sewers and/or manholes that are being replaced. The existing service laterals must be extended / re-routed to the new sewers / manholes as necessary. Service lateral locations could not be determined. Contractor shall be responsible for locating the sewer laterals in the field. New laterals shall be connected to new sewers per STD DTL 25:01.
  5. Storm Drain locations, elevations and sizes shown on the drawings are considered to be approximate and are for general information only. Contractor shall locate all storm drains and accommodate actual conditions. Any damage caused to the storm drain shall be considered incidental to the work and the contractor shall replace the existing storm drain pipe if damaged at no additional cost to the owner.



SEWER PROFILE



THE CITY OF  
GREENVILLE  
P.O. BOX 2207  
GREENVILLE, S.C.

PROJECT NO.	DATE	DRAWN BY	CHECKED BY
EDXXXX	4/12/19	ND	CL

REVISION	No.	DATE	BY/CHKD

VWG STREETSCAPE PHASE 6  
CITY OF GREENVILLE  
GREENVILLE, S.C.  
Sewer Plan & Profile

DRAWING NO.  
**SS - 1**

SYMBOL	DESCRIPTION
	HOME RUN TO LIGHTING/SERVICE PANEL. HASH MARKS, WHEN SHOWN, INDICATE NUMBERS OF CONDUCTORS. " / " INDICATES HOT WIRE, " / " INDICATES NEUTRAL CONDUCTOR, " / " INDICATES GROUND CONDUCTOR. HOME RUN NOTE INDICATES PANEL NAME AND CIRCUIT NAME OR FEEDER TAG. CONDUCTORS SHALL BE #12 AWG IN 3/4" CONDUIT UNLESS NOTED OTHERWISE. ANY HOME RUN OR CONDUIT WITHOUT HASH MARKS IS TO CONTAIN 3 CONDUCTORS; 1 HOT, 1 NEUTRAL, AND 1 EQUIPMENT GROUND, EACH HOT CIRCUIT SHALL BE PAIRED WITH A SEPARATE NEUTRAL CONDUCTOR. SHARING OF NEUTRAL CONDUCTORS BETWEEN CIRCUITS IS NOT ALLOWED.
	CONDUIT RUN UNDERGROUND.
	EXISTING POWER CABINET WITH PANEL.
	JUNCTION BOX STEM INDICATES WALL MOUNTED.
	<u>LIGHTING SYMBOLS:</u> POLE MOUNTED AREA LIGHT

### GENERAL LIGHTING NOTES:

- MANUFACTURERS & NUMBERS ARE LISTED TO ESTABLISH QUALITY ONLY AND NOT TO LIMIT COMPETITION. PRIOR TO BIDDING, SUBSTITUTIONS ARE ALLOWED SUBJECT TO SUBMITTAL DATA, PHOTOMETRICS & ENGINEERS APPROVAL AS REQUIRED BY SPECIFICATIONS.
- POLES FOR FIXTURES ARE TO MATCH FIXTURE FINISH EXACTLY. PROVIDE HAND HOLES AT POLE BASES.
- ALL FIXTURES TO BE U.L. LABELED. ALL EXTERIOR FIXTURES SHALL HAVE U.L. WET LABEL OR DAMP LABEL AS REQUIRED BY LOCATION. CONTRACTOR SHALL VERIFY BEFORE SUBMITTING FIXTURE.
- PROVIDE ALL MOUNTING ACCESSORIES AND HARDWARE REQUIRED.
- LIGHTING FIXTURE, POLE AND ANCHOR BOLTS WILL BE FURNISHED TO CONTRACTOR BY OWNER. CONTRACTOR SHALL INCLUDE ALL COSTS ASSOCIATED WITH FIXTURE INSTALLATION, EXCEPT COST OF FIXTURE AND POLE. CONTRACTOR SHALL PROVIDE AND INSTALL REQUIRED BREAKAWAY COUPLING PER DETAIL BELOW.

### LIGHTING FIXTURE SCHEDULE

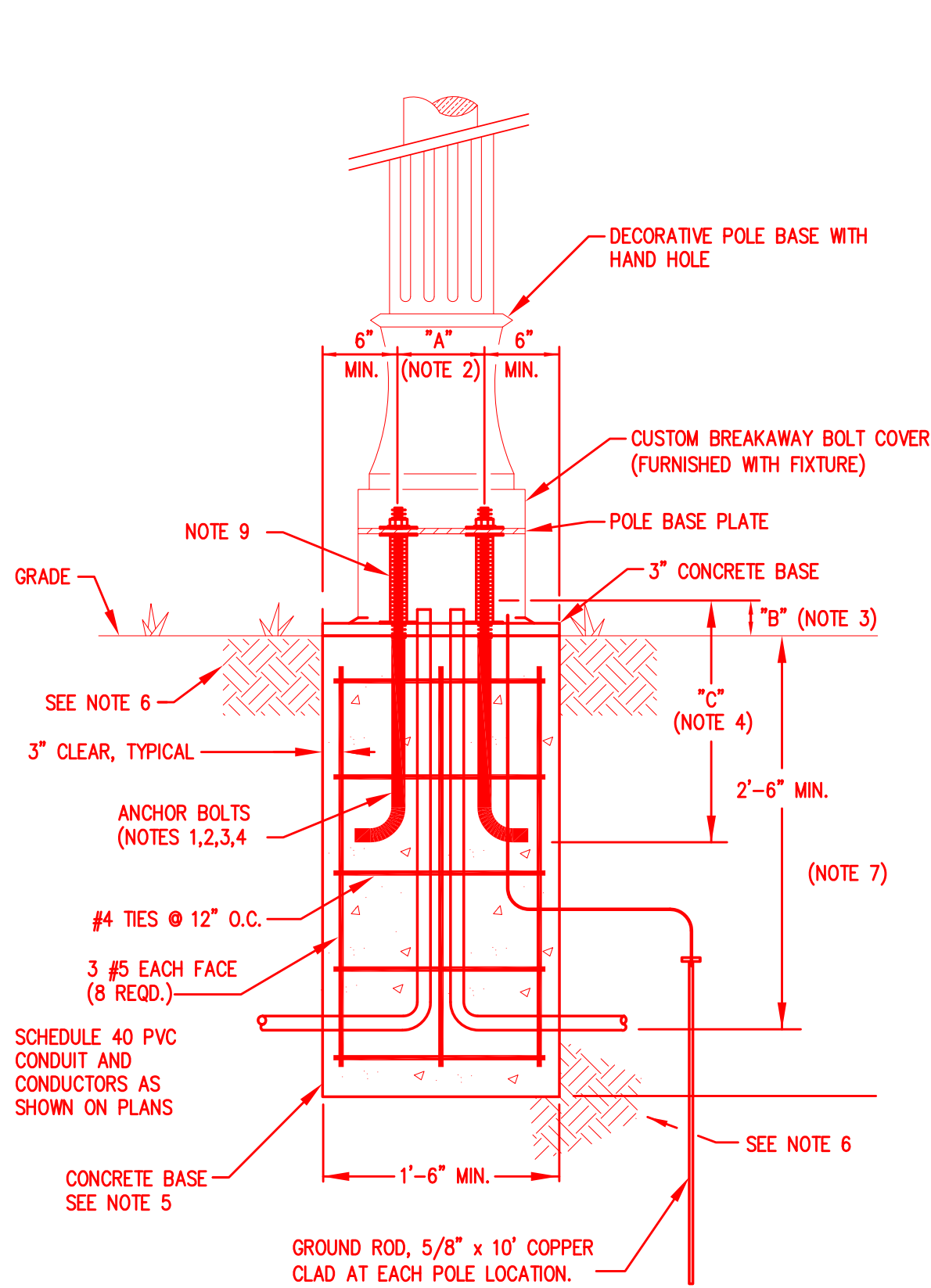
FIXTURE TYPE	FIXTURE DESCRIPTION	ACCEPTABLE MANUFACTURERS	MOUNTING HEIGHT	LAMPS	FIXTURE WATTAGE	VOLTAGE
PA	DECORATIVE PEDESTRIAN LIGHT MOUNTED ON 12' FLUTED POLE, SEE NOTE 5 ABOVE.	FIXTURE AND POLE PROVIDED BY OWNER, INSTALLED BY CONTRACTOR (FIXTURE: BEACON # W1N30 AFED80-DIR5-PT-BB & POLE: BEACON # CENB-F-12-5M-TN-BBT FOR INFORMATION ONLY) WITH CUSTOM EXTENDED BREAKAWAY BOLT COVER.	15' AFG TOP OF FIXTURE	80W LED 4000K	80	120

### ELECTRICAL GENERAL NOTES:

- INSPECT SITE PRIOR TO SUBMITTING BID. DRAWINGS ARE INTENDED TO COVER THE REQUIRED ELECTRICAL SYSTEMS. DRAWINGS MAY NOT SHOW COMPLETE OR ACCURATE DETAILS OF THE BUILDING OR SYSTEM IN EVERY RESPECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ANY ADDITIONAL INFORMATION AS REQUIRED.
- CONFORM TO THE NATIONAL ELECTRICAL CODE (2014), IBC (2015), IECC (2009), APPLICABLE NEMA, ANSI AND IEEE PUBLICATIONS, U.L. AND ADA STANDARDS AND OSHA REQUIREMENTS. COMPLY WITH LOCAL, COUNTY, STATE, AND NATIONAL CODES HAVING JURISDICTION.
- FURNISH AND INSTALL ALL MATERIALS IN A NEAT AND WORKMANLIKE FASHION. ALL MATERIALS SHALL BE NEW, WITH FIRST QUALITY AND UL LABEL.
- VERIFY ALL DIMENSIONS AND CLEARANCES PRIOR TO INSTALLATION OF EQUIPMENT AND RACEWAYS. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF WORK WITH THAT OF ALL OTHER TRADES AS REQUIRED.
- MINIMUM CONDUIT SIZE SHALL BE 1". ALL CONDUCTORS SHALL BE TYPE THHN/THWN, 600V COPPER BUILDING WIRE. MINIMUM SIZE SHALL BE #12 AWG COPPER UNLESS NOTED. UNDERGROUND CONDUITS SHALL BE PVC SCHEDULE 40.
- PROVIDE GROUNDING FOR ALL EQUIPMENT IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
- ALL ENCLOSURES SHALL BE OF THE NEMA TYPE WHICH IS SUITABLE FOR THE APPLICATION.
- SEAL ALL CONDUIT PENETRATIONS TO MATCH RATING OF WALL BEING PENETRATED.
- ALL WORK SHALL HAVE PROPER LABELING AND NAMEPLATES. ALL CIRCUITS SHALL BE LABELED AT PANELS AND BOXES AS INDICATED. ALL PANELS AND DISCONNECTS ARE TO BE PERMANENTLY MARKED WITH NAME OR EQUIPMENT SERVED. ALL PANELS ARE TO BE PROVIDED WITH TYPEWRITTEN PANEL SCHEDULES.
- THOROUGHLY CLEAN ALL EQUIPMENT AND SYSTEMS BEFORE PLACING IN OPERATION. RESTORE FINISHED SURFACES IF DAMAGED AND DELIVER THE ENTIRE INSTALLATION IN AN APPROVED CONDITION. INSTRUCT THE OWNERS' PERSONNEL IN THE PROPER OPERATION AND MAINTENANCE OF THE SYSTEMS. FURNISH TO THE OWNER THREE SETS OF OPERATION AND MAINTENANCE MANUALS FOR EACH SYSTEM.
- GUARANTEE THE WORK INSTALLED FOR A PERIOD OF ONE YEAR AFTER DATE OF FINAL ACCEPTANCE. DEFECTS WHICH APPEAR AS A RESULT OF NORMAL USAGE SHALL BE REMEDIED BY THE CONTRACTOR TO THE COMPLETE SATISFACTION OF THE OWNER WITHOUT COST TO THE OWNER.
- CONTRACTOR SHALL KEEP CURRENT A SET OF PLANS FOR THE DURATION OF CONSTRUCTION WITH ALL CHANGES TO WORK NEATLY AND ACCURATELY MARKED IN RED AND SHALL TURN OVER TO OWNER AT COMPLETION OF PROJECT.

### ABBREVIATIONS:

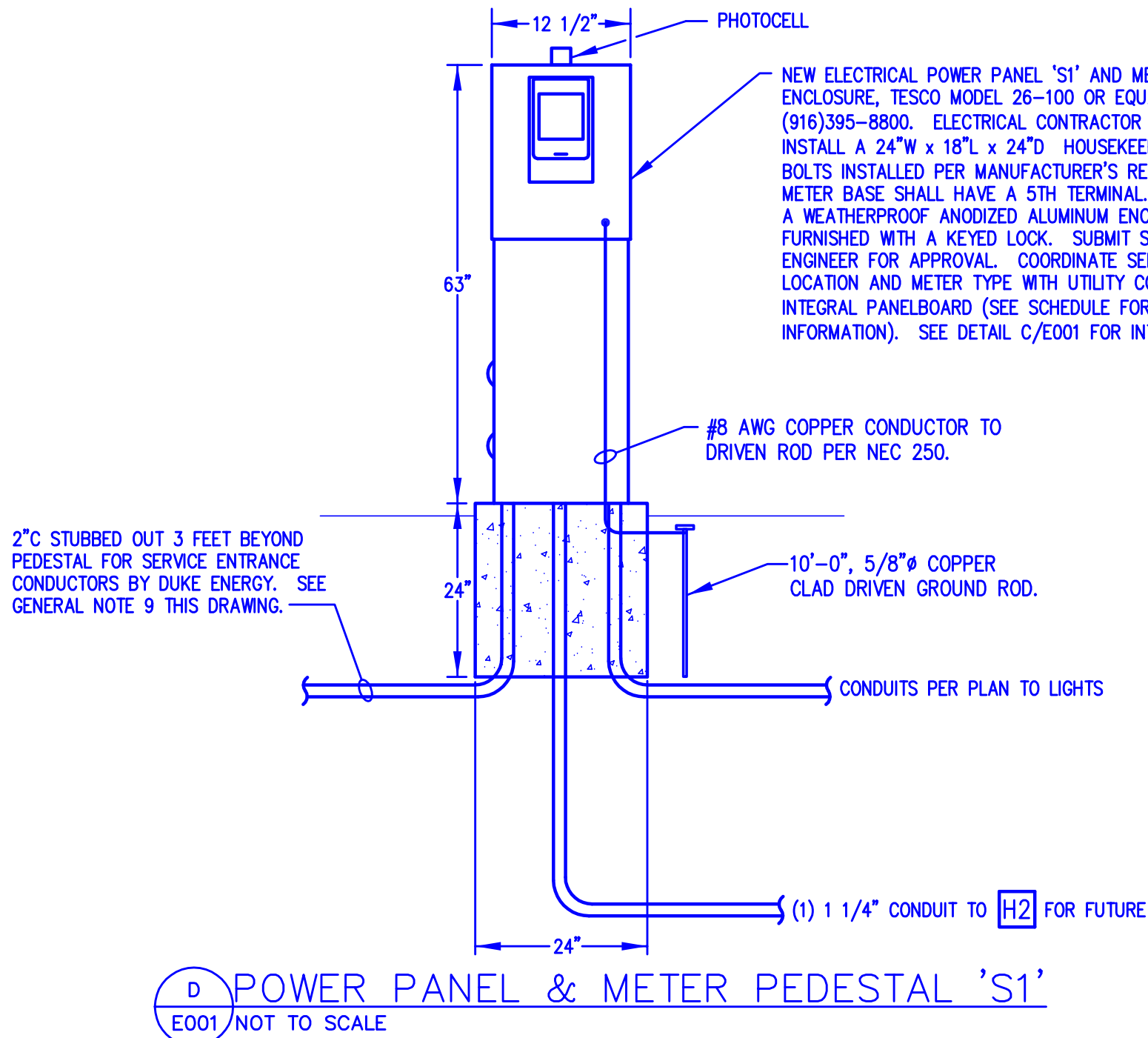
AFG	ABOVE FINISHED GRADE
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
GFI	GROUND FAULT INTERRUPTER DEVICE
HH	HAND HOLE
LTG	LIGHTING (L.)
MCB	MAIN CIRCUIT BREAKER
NTS	NOT TO SCALE
PVC	POLYVINYL CHLORIDE CONDUIT
RECPT	RECEPTACLE (R.)
RGS	RIGID GALVANIZED STEEL
UGND	UNDERGROUND
WP	WEATHER PROOF



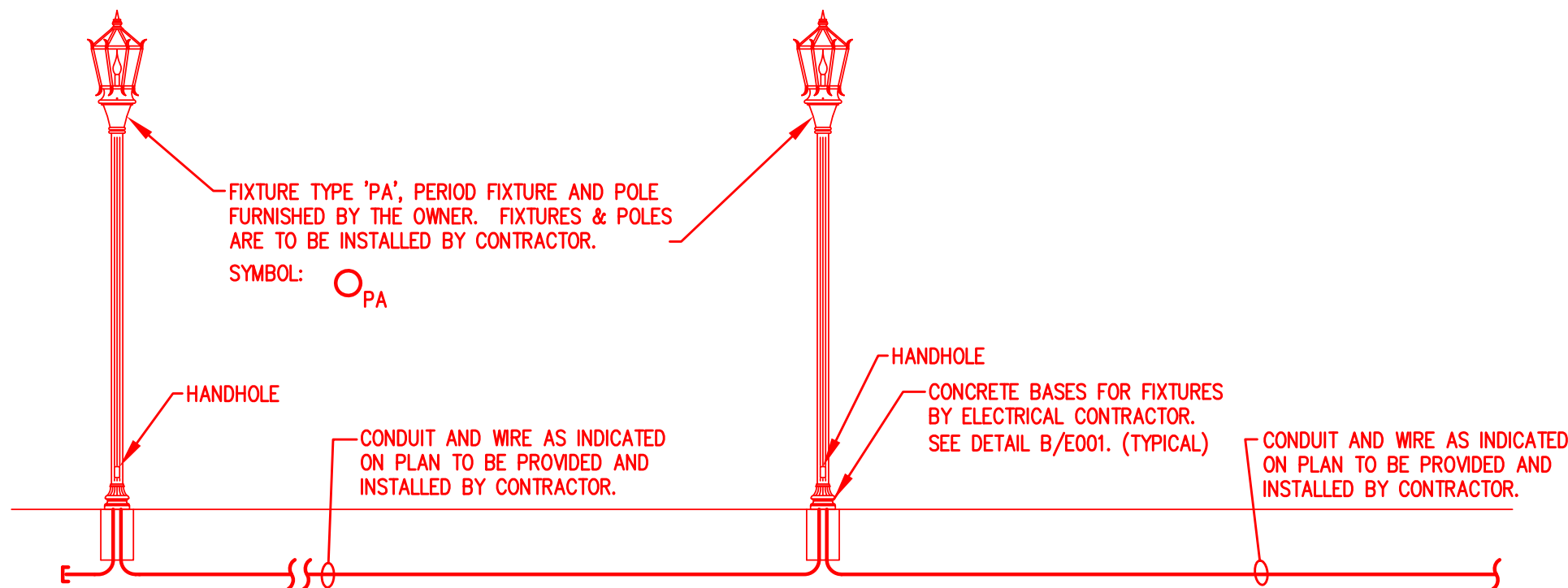
#### NOTES:

- POLE SHALL BE PROVIDED WITH MINIMUM OF FOUR ANCHOR BOLTS WITH DOUBLE NUTS, DOUBLE FLAT WASHERS, AND ONE LOCK WASHER SIZED TO MATCH EACH ANCHOR BOLT. ALL NUTS, WASHERS, AND BOLTS SHALL BE HOT DIPPED GALVANIZED.
- ANCHOR BOLT GAGE, DIMENSION "A", SHALL BE AS REQUIRED BY POLE MANUFACTURER. EXACT LOCATION OF ANCHOR BOLTS SHALL BE DETERMINED BY CONTRACTOR AFTER POLES ARE PURCHASED AND BEFORE CONCRETE BASE IS CONSTRUCTED.
- BOLT PROJECTION, DIMENSION "B", SHALL BE AS RECOMMENDED BY POLE AND BREAKAWAY SUPPORT COUPLINGS MANUFACTURER.
- ANCHOR BOLT EMBEDMENT, DIMENSION "C", SHALL BE AS RECOMMENDED BY POLE MANUFACTURER AND SHALL NOT BE LESS THAN 12". ANCHOR BOLT DIAMETER SHALL NOT BE LESS THAN 3/4".
- CONCRETE BASE SHALL BE OF MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI. REINFORCING BARS SHALL BE DEFORMED STEEL, GRADE 60.
- SOIL AROUND FOUNDATION BASE SHALL BE NON-ORGANIC GRANULAR SOIL COMPACTED TO 95% STANDARD PROCTOR (ASTM D-698). TOP 4 TO 6 INCHES MAY BE TOP SOIL OR PAVEMENT.
- FOUNDATION EMBEDMENT DEPTH, DIMENSION "D", SHALL BE 15 PERCENT OF POLE HEIGHT ABOVE GRADE, MINIMUM OF 3'-0".
- BURIED CONCRETE BASE SHALL BE USED ONLY WHEN POLE IS PROTECTED ON SITE BY BARRIERS OR BY VIRTUE OF LOCATION.
- ALL POLES LOCATED ON MAIN STREETS SHALL BE BREAKAWAY IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS. BREAKAWAY COUPLINGS ARE TO BE TRANSP0 POLE-SAFE 4000 SERIES OR EQUAL.

**B** TYPICAL BURIED CONCRETE BASE – BREAKAWAY BOLTS  
E001 NOT TO SCALE



**D** POWER PANEL & METER PEDESTAL 'S1'  
E001 NOT TO SCALE



#### NOTES:

- CONTRACTOR SHALL COORDINATE ROUTING OF ALL UNDERGROUND CONDUITS AND PLACEMENT OF IN-GRADE ENCLOSURES WITH ALL OTHER UTILITIES.
- CONTRACTOR SHALL COORDINATE ALL FINAL ROUTING OF CONDUITS IN SUCH A MANNER AS TO MITIGATE INTERFERENCE WITH LANDSCAPE FEATURES. PAINT PROPOSED ROUTING FOR REVIEW BY OWNER/ARCHITECT PRIOR TO ACTUAL INSTALLATION OF RACEWAYS.

**A** TYPICAL LIGHTING DETAIL  
E001 NOT TO SCALE

PANEL 'S1'(EXISTING)		CABINET SURFACE MOUNTED		TYPE TESCOFLEX 26-100	
VOLTAGE		FEEDER		MAINS 100A MCB	
DEVICE	BRANCH CIRCUIT	PHASE LOAD		BRANCH CIRCUIT	DEVICE
AMPS TRIP	POLES	DESIGNATION	No.	DESIGNATION	POLES
20	1	L-PEDESTRIAN POLE LIGHTS	1	2	1
20	1	L-PEDESTRIAN POLES	3	4	1
20	1	L-PESTOON	5	6	1
20	1	R-PLANTER	7	8	1
20	1	R-PLANTER	9	10	1
20	1	R-PLANTER	11	12	1
INTEGRATED EQUIPMENT RATING: 10,000 AIC		KVA TOTAL		PANELBOARD KVA LOAD TOTAL:	
		1.1		2.2	

#### PANEL NOTES:

- EXISTING BREAKER, EXISTING LOAD.
- EXISTING BREAKER, NEW LOAD.
- CONTRACTOR TO CONFIRM AVAILABLE BREAKERS AND EXISTING LOADS. NOTIFY ENGINEER WITH ANY DISCREPANCIES.



VILLAGE OF WEST GREENVILLE  
PHASE IV STREETSCAPE &  
LANDSCAPE IMPROVEMENTS  
FOR  
THE CITY OF GREENVILLE, SC

PROJECT: 17072

DRAWN/CHECKED BY: RAB/DJB

BY: RAB

DATE: 9/18/17

REVISIONS:

ISSUED FOR CONSTRUCTION

NO. 1

DATE: 9/18/17

REVISIONS:

ISSUED FOR CONSTRUCTION

NO. 1

DATE: 9/18/17

REVISIONS:

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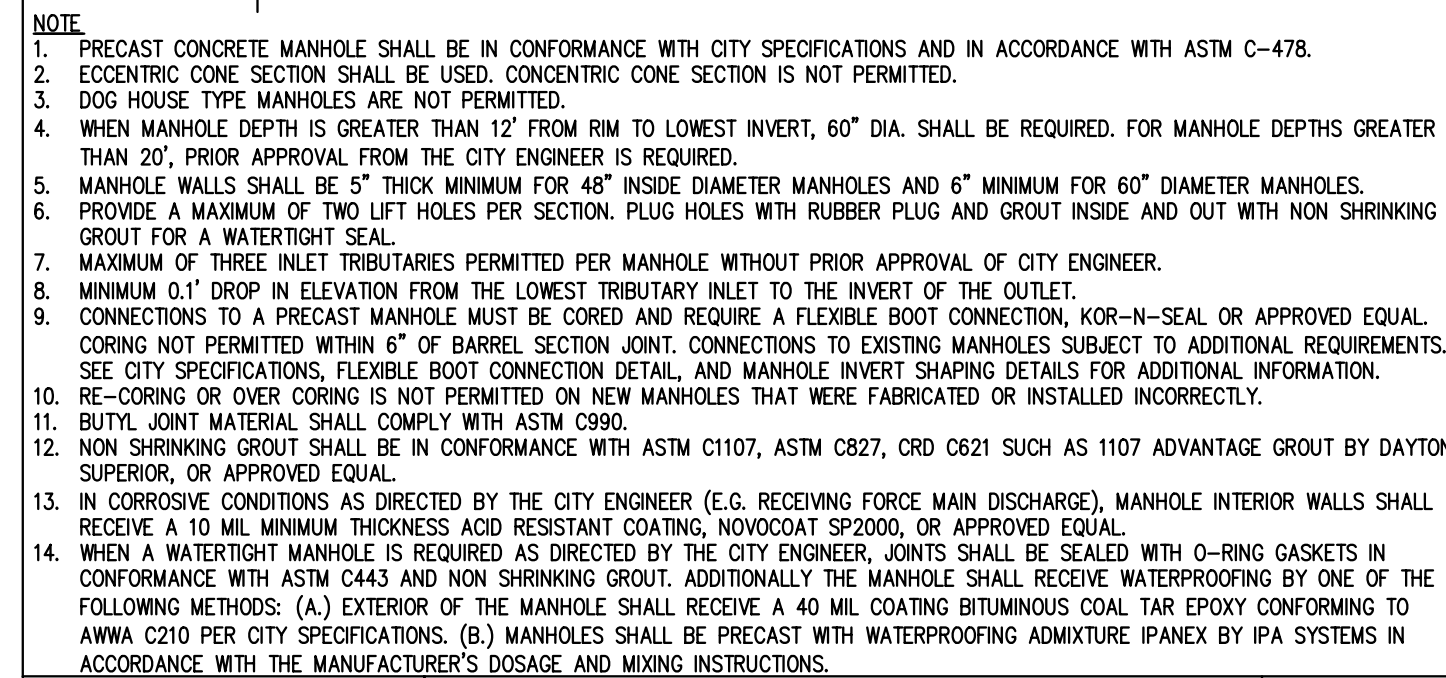
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**PLAN**

10" MIN.

9 3/4" MIN.

**FRONT**

12" MIN.

10 3/4" MIN.

**SECTION A-A**

3 3/4" MIN.

5 3/4" MIN.

1/2" DIA. GRADE 60 STEEL REINFORCEMENT PER ASTM A615 POWDER EPOXY COATED PER ASTM A934

COPOLYMER POLYPROPYLENE PLASTIC PER ASTM D4101

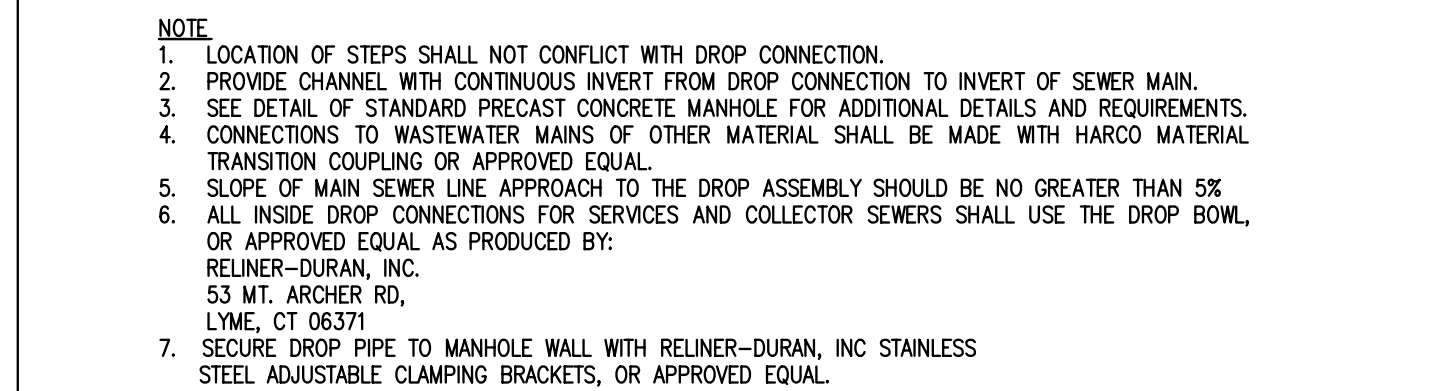
3" MIN.

1" MIN.

1" (TYP.)

**NOTE.**

1. STEPS SHALL CONFORM TO ASTM C478 AND OSHA STANDARDS. ML 10 BY AMERICAN STEP COMPANY, INC., OR APPROVED EQUAL.
2. STEPS SHALL BE INSTALLED IN ALL STRUCTURES GREATER THAN 4 FEET OF DEPTH MEASURED FROM THE TOP OF THE MANHOLE COVER TO THE LOWEST INVERT OF THE FLOW CHANNEL.
3. STEPS SHALL BE PLACED 12-16 INCHES CENTER TO CENTER ON WALL, AND PROTRUDE A MINIMUM OF 5 3/4 INCHES FROM THE INSIDE FACE OF STRUCTURE WALL. STEP SPACING WITHIN A SINGLE STRUCTURE SHALL BE MAINTAINED WITHIN 1" OF THE AVERAGE STEP SPACING FOR THAT STRUCTURE.
4. STEPS SHALL BE LOCATED TO ALLOW DIRECT ACCESS FROM THE SURFACE TO THE TABLE.



MANHOLE WALL


FLEXIBLE RUBBER BOOT CONNECTOR

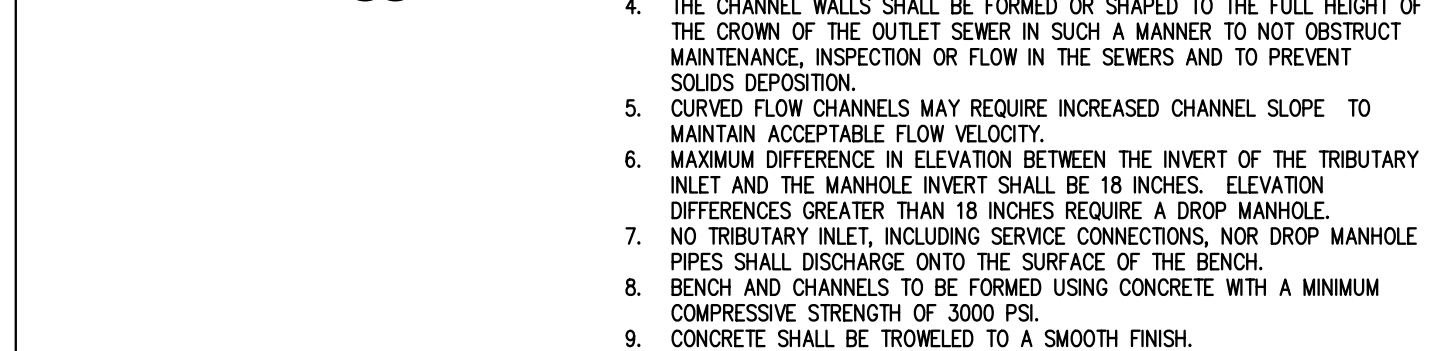
EXPANDER BAND

STAINLESS STEEL BAND CLAMP AND HARDWARE

**NOTE**

1. ALL PIPE CONNECTIONS INTO PRECAST MANHOLES SHALL BE INSTALLED BY CORING AND UTILIZE A FLEXIBLE BOOT SUCH AS KOR-NE-SEAL® OR APPROVED EQUAL.
2. THE FLEXIBLE BOOT SHALL BE IN CONFORMANCE WITH THE LATEST CITY STANDARD SPECIFICATIONS AND IN ACCORDANCE WITH ASTM C923, ASTM A666, AND ASTM A240.
3. THE INSTALLED PIPE SHALL HAVE A SMOOTH, FORMED INVERT; BORING OR CHIPPING OF THE EXISTING TABLE TO THE FLOW CHANNEL IS REQUIRED.
4. CORINGS FOR BOOT CONNECTORS SHALL NOT BE MADE WITHIN SIX INCHES OF A MANHOLE BARREL SECTION JOINT.
5. OTHER THAN PRECAST CONCRETE MANHOLES AND WITHOUT THE WRITTEN APPROVAL OF THE CITY ENGINEER, EXISTING MANHOLES MAY NOT BE CORED.
6. RE-CORING OR OVER CORING AN EXISTING CONNECTION MAY NOT BE ACCEPTED BY THE CITY AND SHOULD BE AVOIDED.

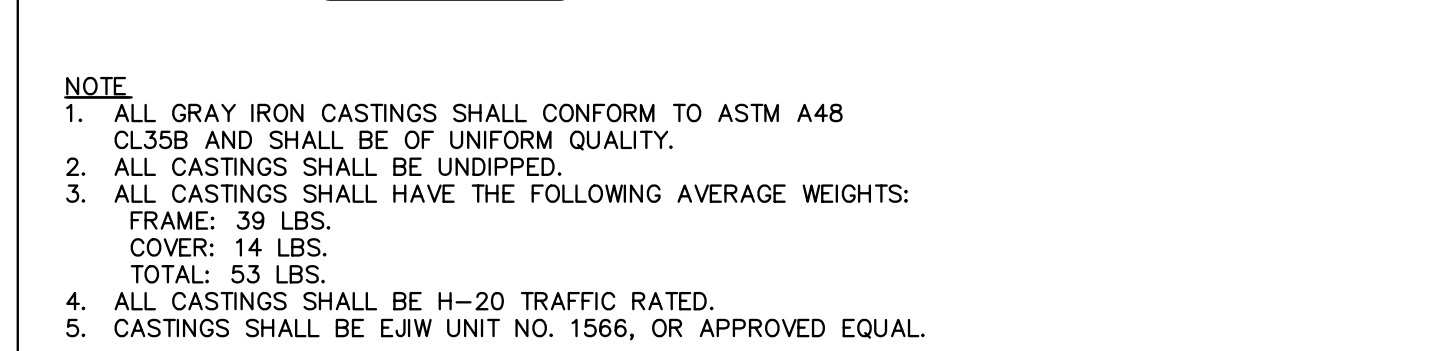
 <b>city of greenville</b> ENGINEERING DIVISION	<b>FLEXIBLE BOOT CONNECTION</b>		SCALE <b>NO SCALE</b> DETAIL:
	DATE APPROVED: <b>JUNE 2010</b>	OFFICE OF THE CITY ENGINEER: <i>Phillip B. Lindsey</i>	<b>21:05</b>



**NOTE**

1. COVER DEPTH SHALL BE MEASURED FROM FINISHED GRADE SURFACE TO THE TOP OF PIPE.
2. INSTALLATIONS DEEPER THAN 20 FEET REQUIRE DUCTILE IRON PIPE (DIP) AND PRIOR APPROVAL BY THE CITY ENGINEER. BURIAL DEPTHS LESS THAN 3.0 FEET WILL NOT BE PERMITTED.
3. POLY VINYL CHLORIDE (PVC) SEWER PIPE SHALL BE SDR 26 OR SDR 35 MEETING ASTM D3034 FOR 4" TO 15" DIAMETER PIPE OR ASTM F679 FOR 18" TO 36" DIAMETER PIPE. PIPE SHALL BE MADE FROM PVC COMPOUNDS HAVING A CELL CLASSIFICATION OF 1245AB AS DEFINED IN ASTM D1784. PIPE SHALL INCORPORATE AN INTEGRAL BELL JOINT WITH A SINGLE RUBBER GASKET CONFORMING TO ASTM F477. JOINTS SHALL BE IN ACCORDANCE WITH ASTM D3212, AND BE FURNISHED COMPLETE WITH ALL NECESSARY ACCESSORIES. PIPE, FITTINGS AND ACCESSORIES SHALL BE IN CONFORMANCE WITH CITY SPECIFICATIONS.
4. DIP SEWER PIPE SHALL BE ASPHALT COATED CEMENT MORTAR LINED CLASS 50 DUCTILE IRON PIPE. DIP SHALL BE PRESSURE CLASS 150. DIP SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH ANSI/AWWA C150/A21.50 AND C151/A21.51. PIPE SHALL HAVE A STANDARD 1-MIL ASPHALTIC COATING APPLIED ON THE EXTERIOR OF THE PIPE IN ACCORDANCE WITH ANSI/AWWA C151/A21.51. PIPE SHALL ALSO HAVE A CEMENT-MORTAR LINING ON THE INTERIOR IN ACCORDANCE WITH ANSI/AWWA C104/A21.4. ALL PIPE SHALL BE FURNISHED WITH PUSH-ON TYPE JOINTS, SUCH AS TYTON® OR FASTFLEX. JOINTS SHALL BE IN ACCORDANCE WITH ANSI/AWWA C111/A21.11, AND BE FURNISHED COMPLETE WITH ALL NECESSARY ACCESSORIES. PIPE, FITTINGS AND ACCESSORIES SHALL BE IN CONFORMANCE WITH CITY SPECIFICATIONS.
5. WHEN SOIL TESTS IN ACCORDANCE WITH APPENDIX A OF ANSI/AWWA C105/A21.5 AND/OR PERFORMANCE HISTORY INDICATE THAT CONDITIONS ARE CORROSIVE TO DIP, POSITIVE CORROSION PROTECTION IS REQUIRED IN ACCORDANCE WITH CITY SPECIFICATIONS.
6. WHEN DIP IS USED TO TRANSPORT SEPTIC SEWAGE, SPECIALLY LINED PIPE IS REQUIRED IN ACCORDANCE WITH CITY SPECIFICATIONS.

	<h2 style="margin: 0;">ALLOWABLE PIPE MATERIAL AND DEPTHS</h2>		SCALE <b>NO SCALE</b> DETAIL
	DATE APPROVED: <b>JUNE 2010</b>	OFFICE OF THE CITY ENGINEER: <i>Philip A. J. [Signature]</i>	<b>22:00</b>



**PLAN**

1' RIGHT-OF-WAY

0 x D x Z WYE  
(D=SEWER MAIN DIA.)  
(Z=SERVICE DIA.)

45° BEND  
(AS REQUIRED)

SERVICE CONNECTION

SEWER MAIN FLOW

**PROFILE**

CLEANOUT FRAME AND COVER PER DETAIL

6" MIN. COMPACTED #57 STONE

18" MIN.

CLEANOUT ASSEMBLY  
2-45° BENDS, RISER, AND PLUG

5000 SERIES STRONG BACK PC COUPLING BY FRNCO® OR APPROVED EQUAL

PLUG ASSEMBLY

ALL WYES, BENDS, FITTINGS AND SERVICE CONNECTION PIPE SHALL BE ENCASED IN A MINIMUM OF 4" COMPACTED #57 STONE.

45° BEND  
(AS REQUIRED)

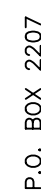
SEWER MAIN WYE WITH BRANCH

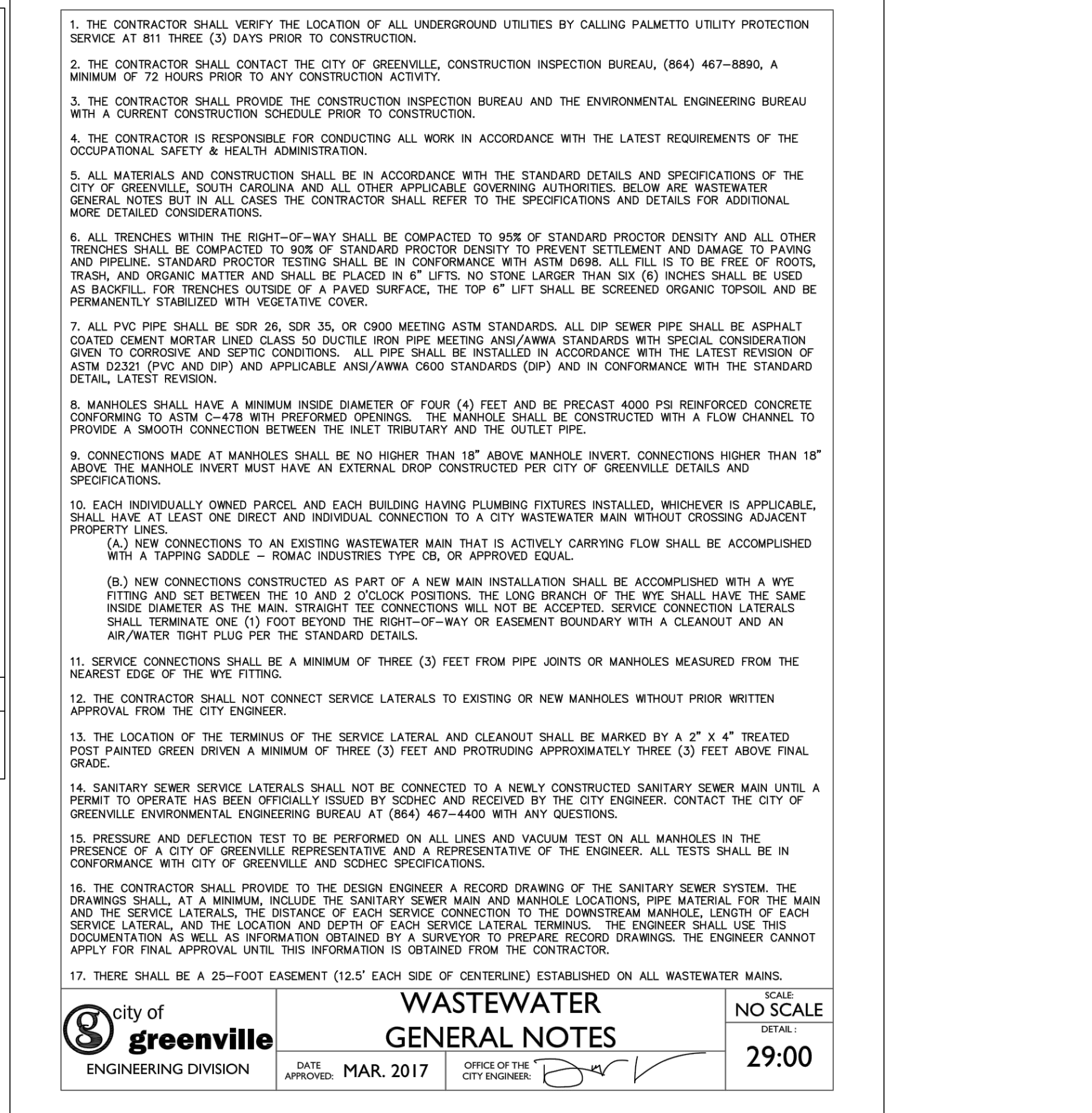
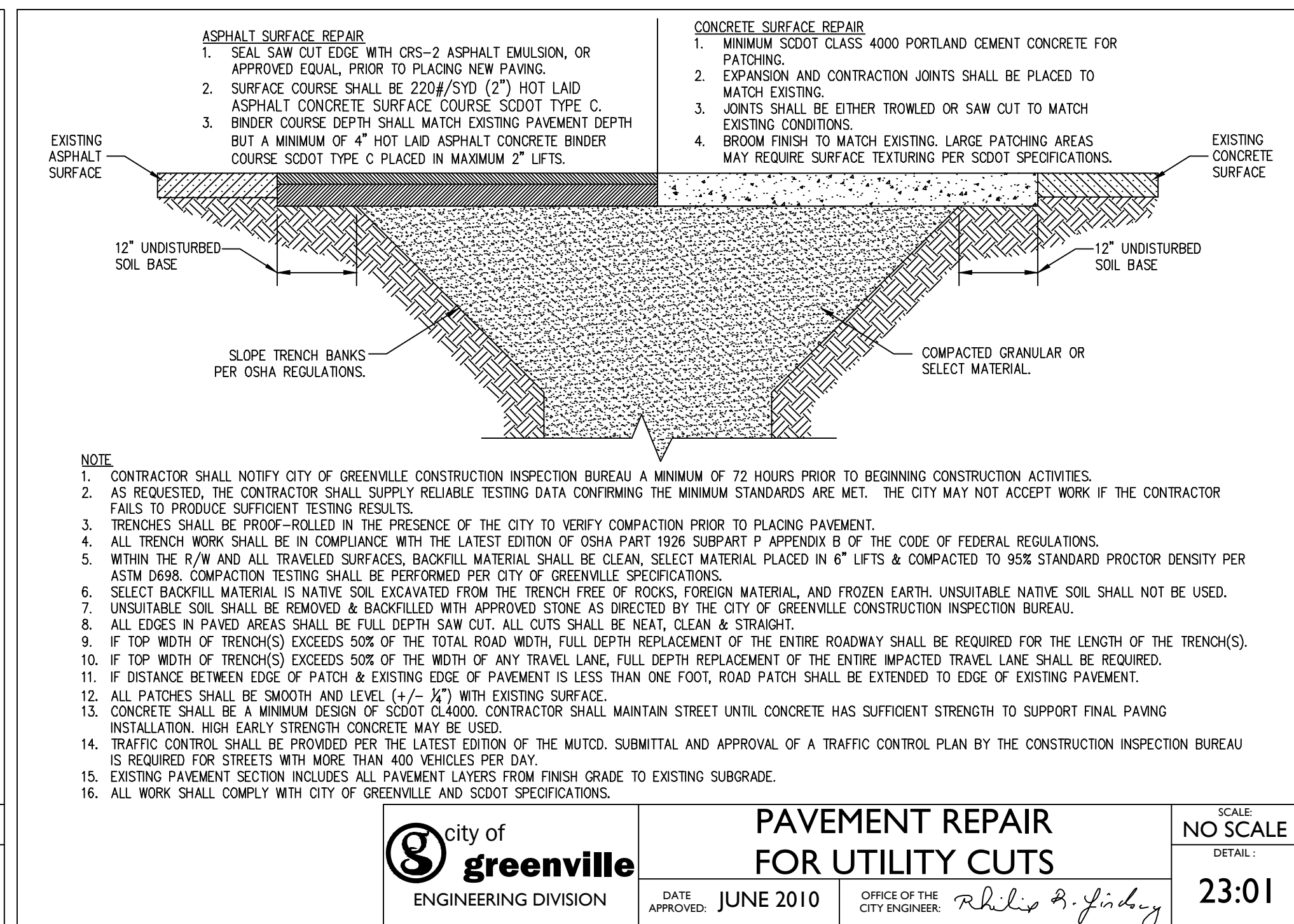
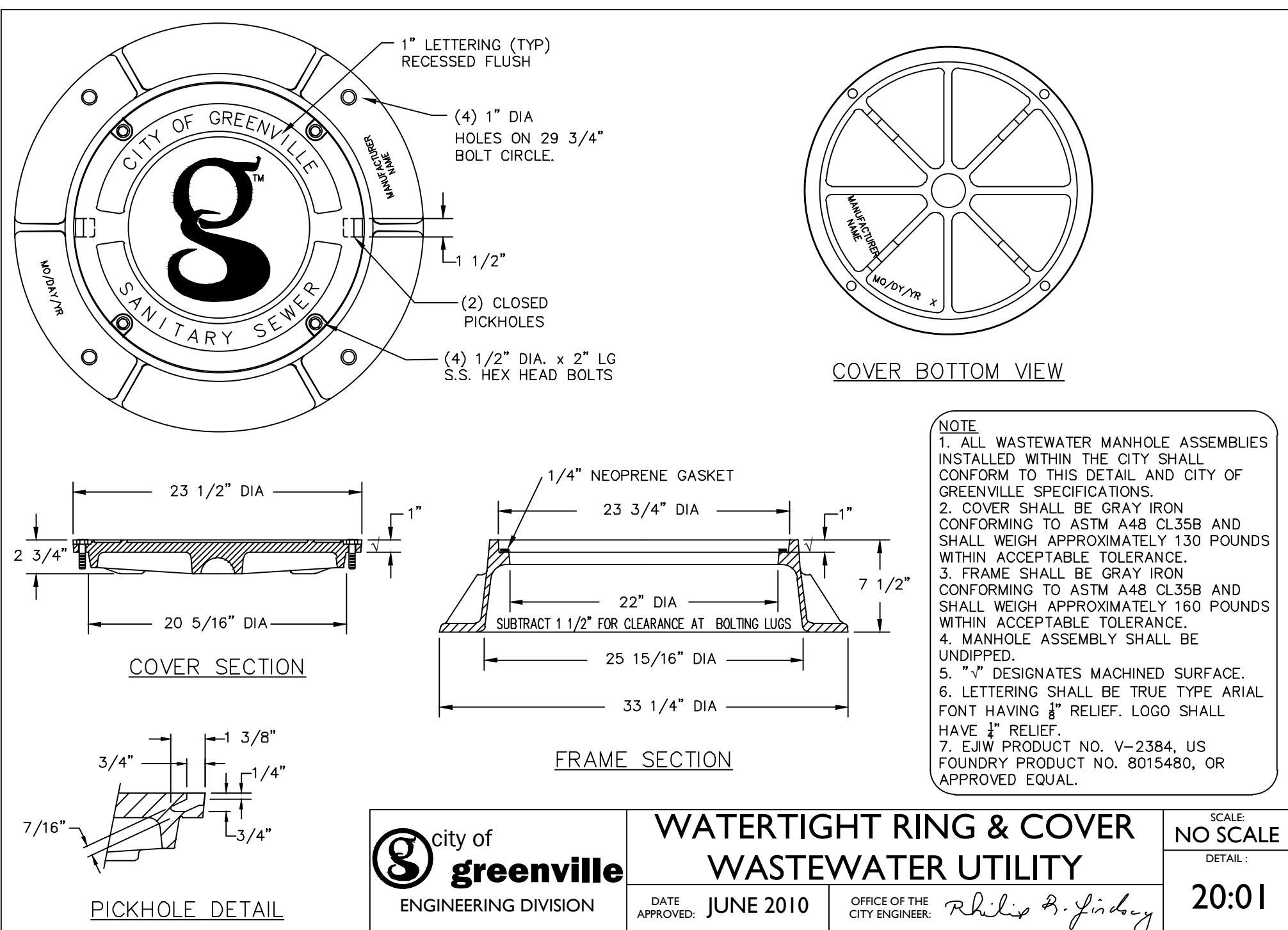
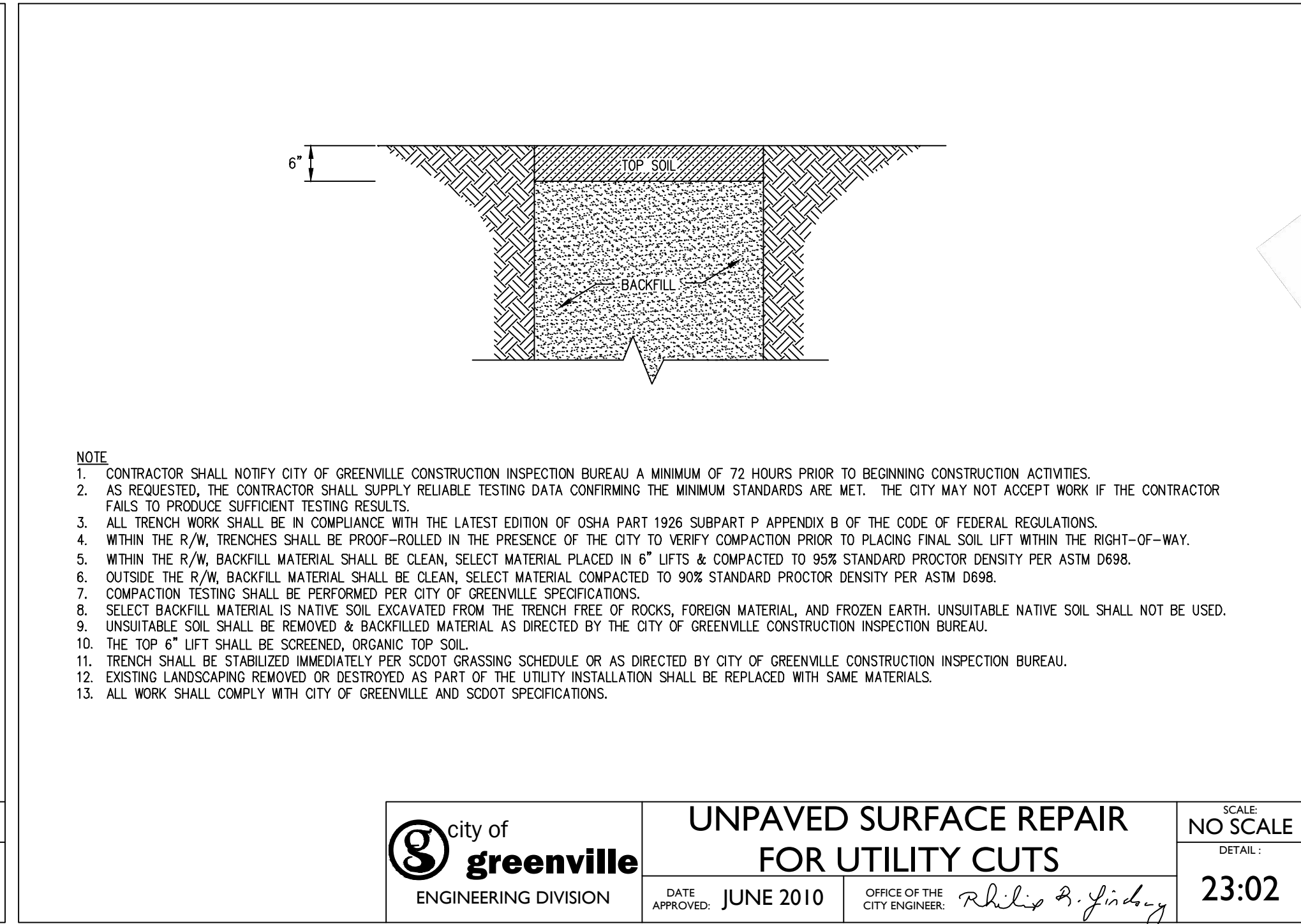
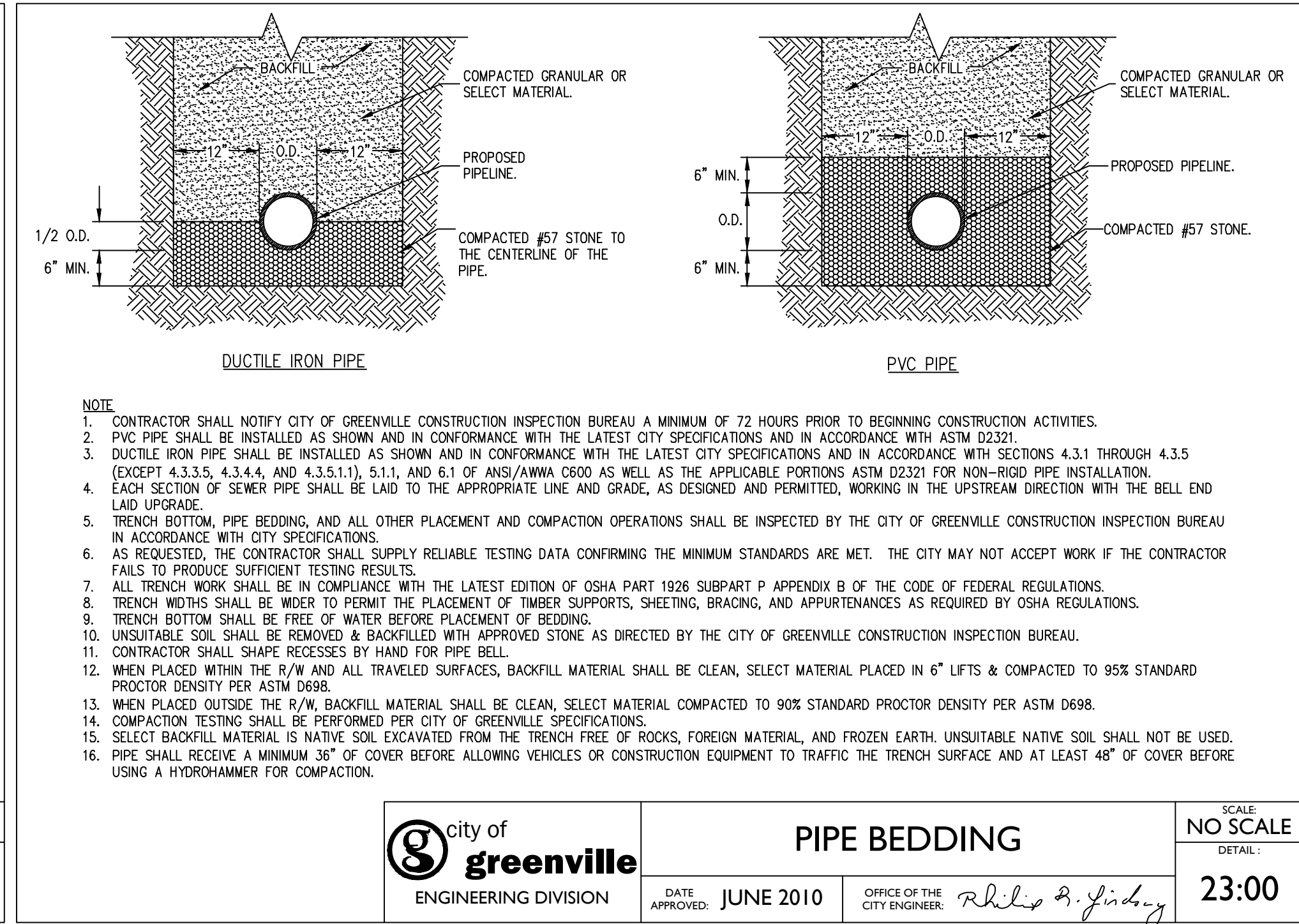
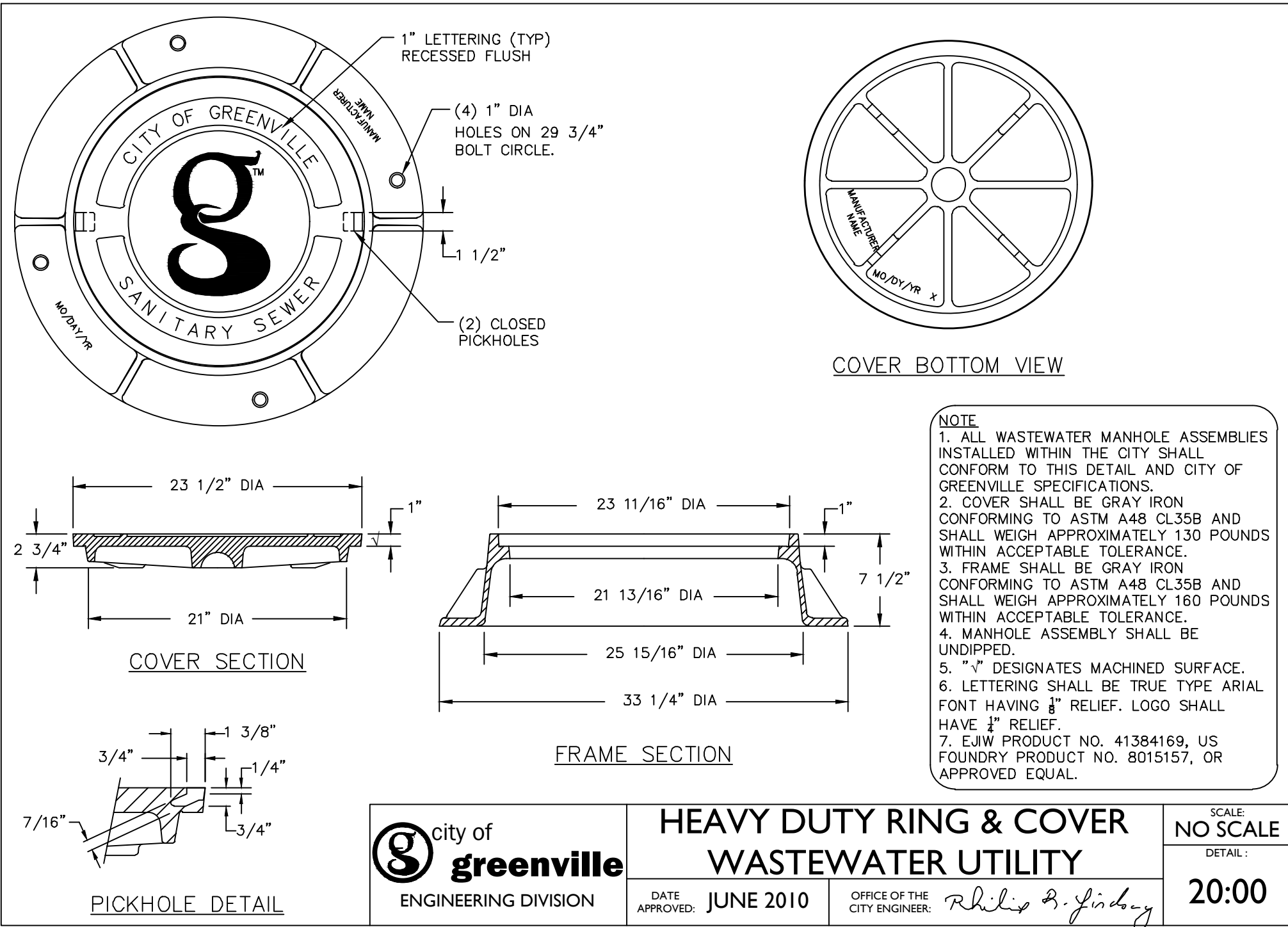
SERVICE CONNECTION  
1% MIN. SLOPE

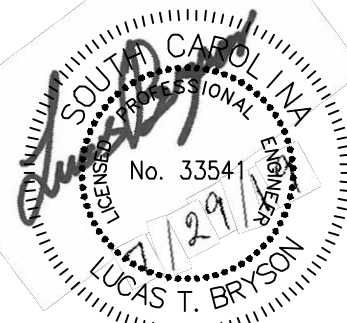

MAIN SEWER LINE BEDDING

**NOTE:**

- SERVICE CONNECTION DETAIL IS FOR THE INSTALLATION OF A NEW SERVICE CONNECTION STUB OUT AS PART OF A NEW MAIN SEWER LINE INSTALLATION. CONNECTIONS TO EXISTING SEWER LINES OR CONNECTION OF THE BUILDING DRAIN TO THE SERVICE CONNECTION STUB OUT SHALL BE INSTALLED PER THE INTERNATIONAL PLUMBING CODE (IPC) OR INTERNATIONAL RESIDENTIAL CODE (IRC) AS APPROPRIATE.
- WHEN THE BUILDING SEWER IS EXTENDED FROM THE STUB OUT TO THE BUILDING DRAIN, THE BUILDING SEWER AND ITS APPURTENANCES SHALL BE PERMITTED THROUGH AND INSPECTED BY THE CITY OF GREENVILLE BUILDING CODE DIVISION.
- WITHOUT PRIOR KNOWLEDGE OF THE VARIABLES REQUIRED TO SIZE THE SERVICE CONNECTION PER THE IPC OR IRC, THE MINIMUM DIAMETER OF THE SERVICE CONNECTION STUB OUT SHALL BE MINIMUM FOUR (4) INCH DIA. FOR SINGLE FAMILY RESIDENTIAL AND MINIMUM SIX (6) INCH DIA. FOR COMMERCIAL AND MULTIFAMILY DEVELOPMENT.
- MINIMUM SLOPE OF THE SERVICE LATERAL IS 1.00% OR 1/8" PER FOOT.
- THE SERVICE CONNECTION STUB OUT AND ITS APPURTENANCES SHALL BE OF THE SAME MATERIAL AS THE MAIN SEWER LINE.
- SERVICE CONNECTION SHALL BE MADE WITH ONE (1) WYE FITTING. THE LONG BRANCH OF THE WYE SHALL HAVE THE SAME INSIDE DIAMETER AS THE WASTEWATER MAIN. TEE FITTINGS ARE NOT PERMITTED.
- THE WYE FITTING SHALL BE SET BETWEEN THE 10 AND 2 O'CLOCK POSITIONS ALONG THE MAIN SEWER LINE PIPE CIRCUMFERENCE.
- NO BENDS GREATER THAN 45° SHALL BE USED IN SERVICE CONNECTION INSTALLATION.
- SERVICE CONNECTIONS SHALL BE A MINIMUM OF THREE (3) FEET FROM PIPE JOINT OR MANHOLE, MEASURED FROM THE NEAREST EDGE OF THE WYE FITTING.
- CONNECTIONS SHALL BE POSITIONED ALONG THE MAIN SEWER LINE TO PROVIDE AN INDIVIDUAL, SEPARATE AND DIRECT CONNECTION FROM THE STRUCTURE TO THE WASTEWATER MAIN. CONNECTIONS SHALL NOT CROSS ADJACENT LOT PROPERTY LINES.
- A SERVICE CONNECTION CLEANOUT SHALL BE INSTALLED ONE (1) FOOT FROM THE RIGHT-OF-WAY LINE OR EASEMENT BOUNDARY WITH A CLEANOUT FRAME AND COVER PER DETAIL.
- THE SERVICE CONNECTION SHALL BE ELUGED TO PREVENT INFILTRATION AND SEDIMENTATION OF THE LINE.
- SERVICE CONNECTIONS SHALL NOT BE CONNECTED TO A NEWLY CONSTRUCTED MAIN SEWER LINE UNTIL A PERMIT TO OPERATE (PTO) HAS BEEN OFFICIALLY ISSUED BY SDOHCE. CONTACT CITY OF GREENVILLE ENGINEERING (467-4400) WITH ANY QUESTIONS.







**THE CITY OF GREENVILLE**

GREENVILLE, S.C.

P.O. BOX 2207

PROJECT NO.	DATE	BY/CHKD
EDXXX	4/12/19	
DRAWN BY		
ND		
CHECKED BY		
CL		

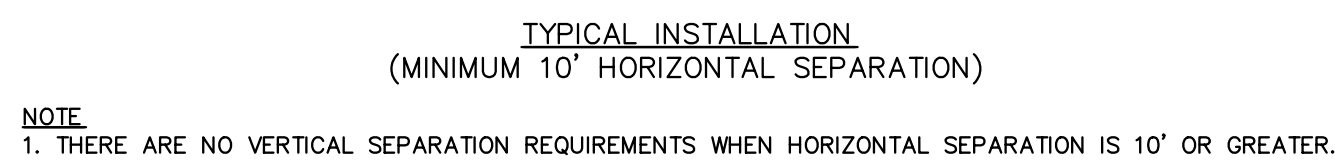
**VWG STREETScape PHASE 6**

**CITY OF GREENVILLE**

**GREENVILLE, S.C.**

**DETAILS**

DRAWING NO.  
**D2**



**NOTE:**

1. THE SEWER MUST BE LAID IN A SEPARATE TRENCH FROM THE WATER.
2. THE TOP OF THE SEWER MAIN MUST BE A MINIMUM OF 18" BELOW THE BOTTOM OF THE WATER MAIN.
3. WHERE THE MINIMUM 18" SEPARATION CANNOT BE OBTAINED, THE FOLLOWING SPECIFICATIONS APPLY:
  - A. ALL REASONABLE EFFORT MUST BE MADE FOR THE SEWER LINE TO BE LOCATED UNDER THE WATER MAIN.
  - B. SEWER MAIN SHALL BE CONSTRUCTED OF SLIP TYPE OR MECHANICAL JOINT PIPE COMPLYING WITH ANSI/AWWA C800 OR ANSI/AWWA C600, PUBLIC WATER SUPPLY STANDARDS FROM NEAREST DISTRICT MANHOLE DOWNSIDE.
  - C. ENTIRE LINE SHALL BE TESTED AT A HIGHER PRESSURE AS SPECIFIED IN THE HORIZONTAL/VERTICAL SEPARATION SECTION OF CHAPTER 8 IN THE DESIGN SPECIFICATION MANUAL TO ASSURE WATER TIGHTNESS PROOF.



SCALE:  
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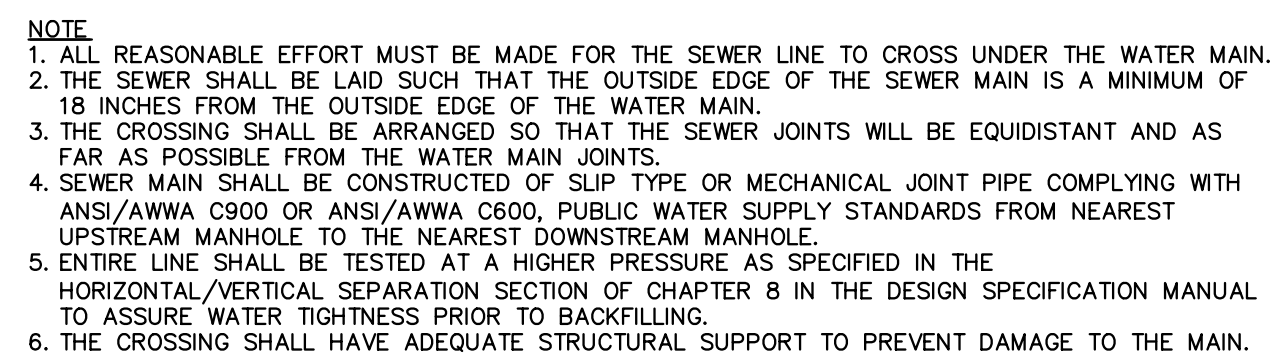
DETAIL :

DATE APPROVED: MAR. 2017

OFFICE OF THE  
CITY ENGINEER:

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22:01

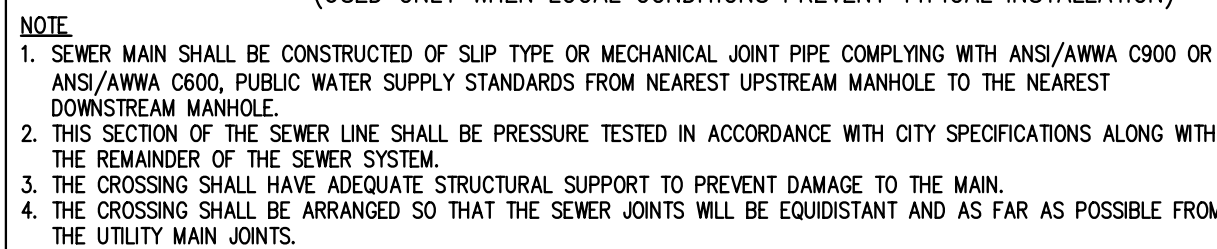


## SEWER & WATER CROSSING SEPARATION

DATE APPROVED: MAR. 2017

OFFICE OF THE  
CITY ENGINEER:

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NEW UTILITY MAIN INSTALLATION  
(USED ONLY WHEN LOCAL CONDITIONS PREVENT 18" MINIMUM CLEARANCE)



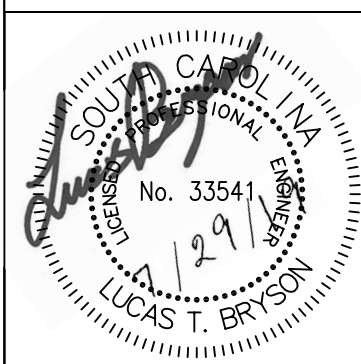
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DATE APPROVED: MA

AR. 2017

OFFICE OF THE  
CITY ENGINEER:

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THE CITY OF  
GREENVILLE

GREENVILLE, S.C.

P.O. BOX 2207

PROJECT NO.	REVISION	No.	DATE	BY/CHKD
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4/12/19				
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## VWG STREETSCAPE PHASE 6

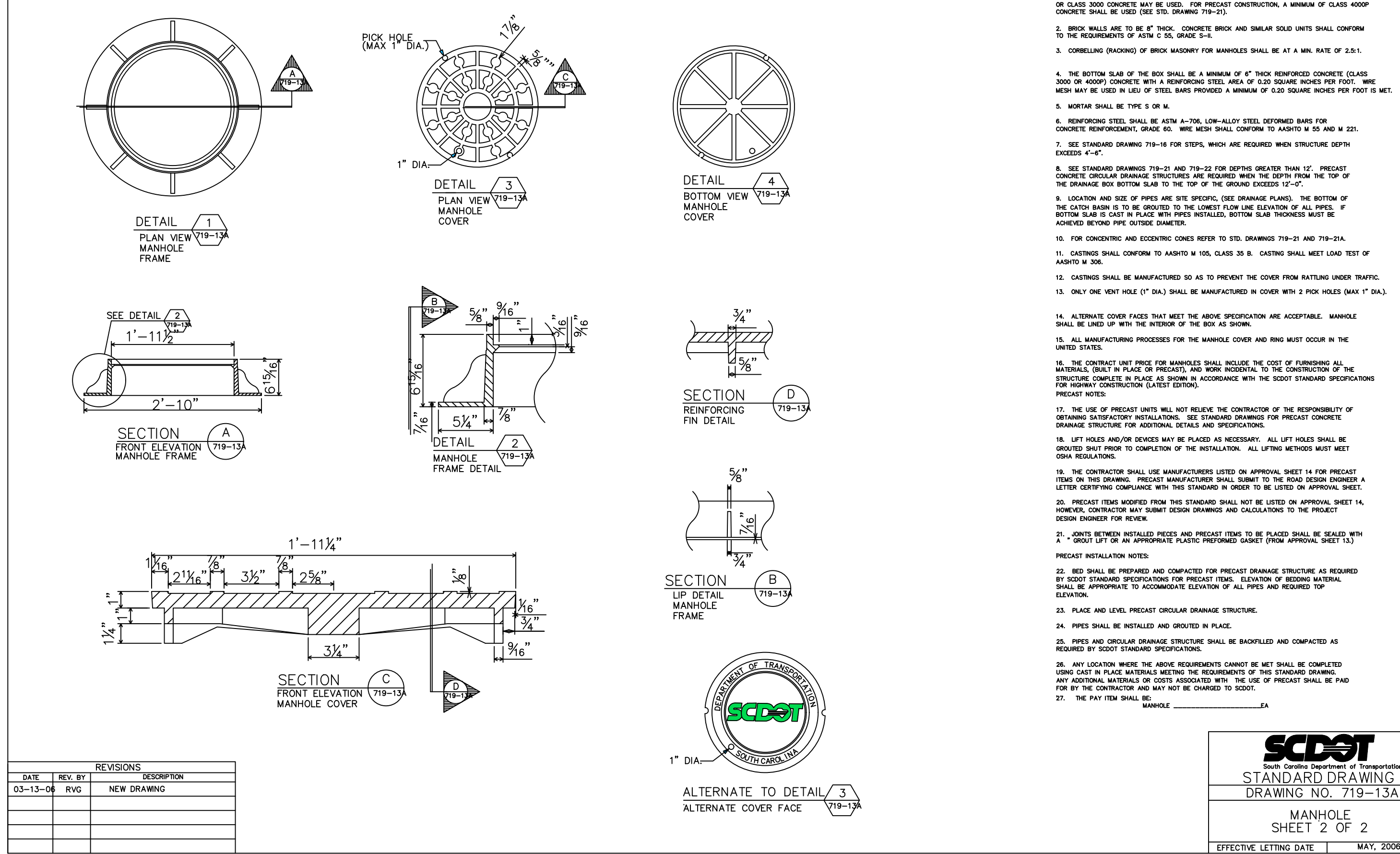
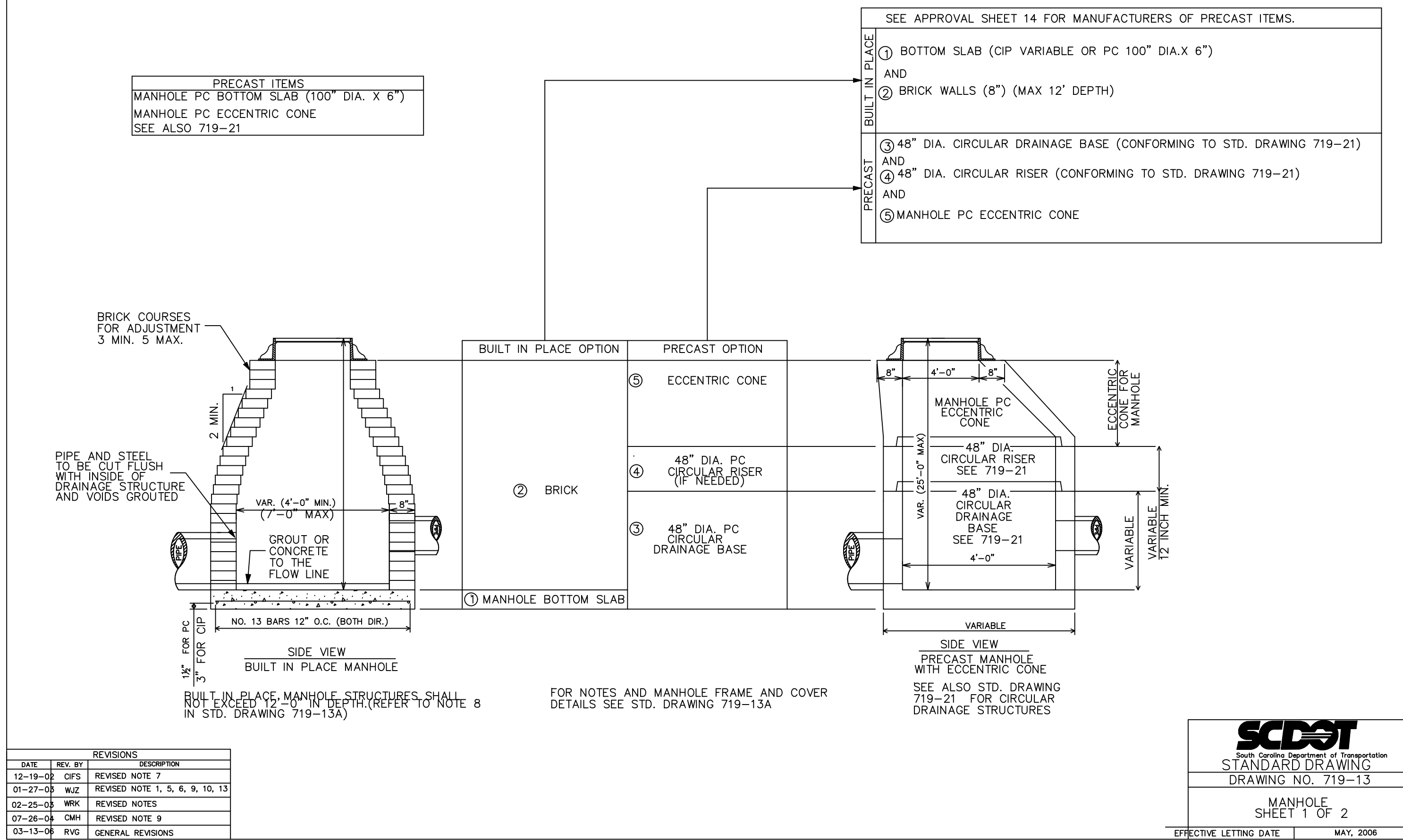
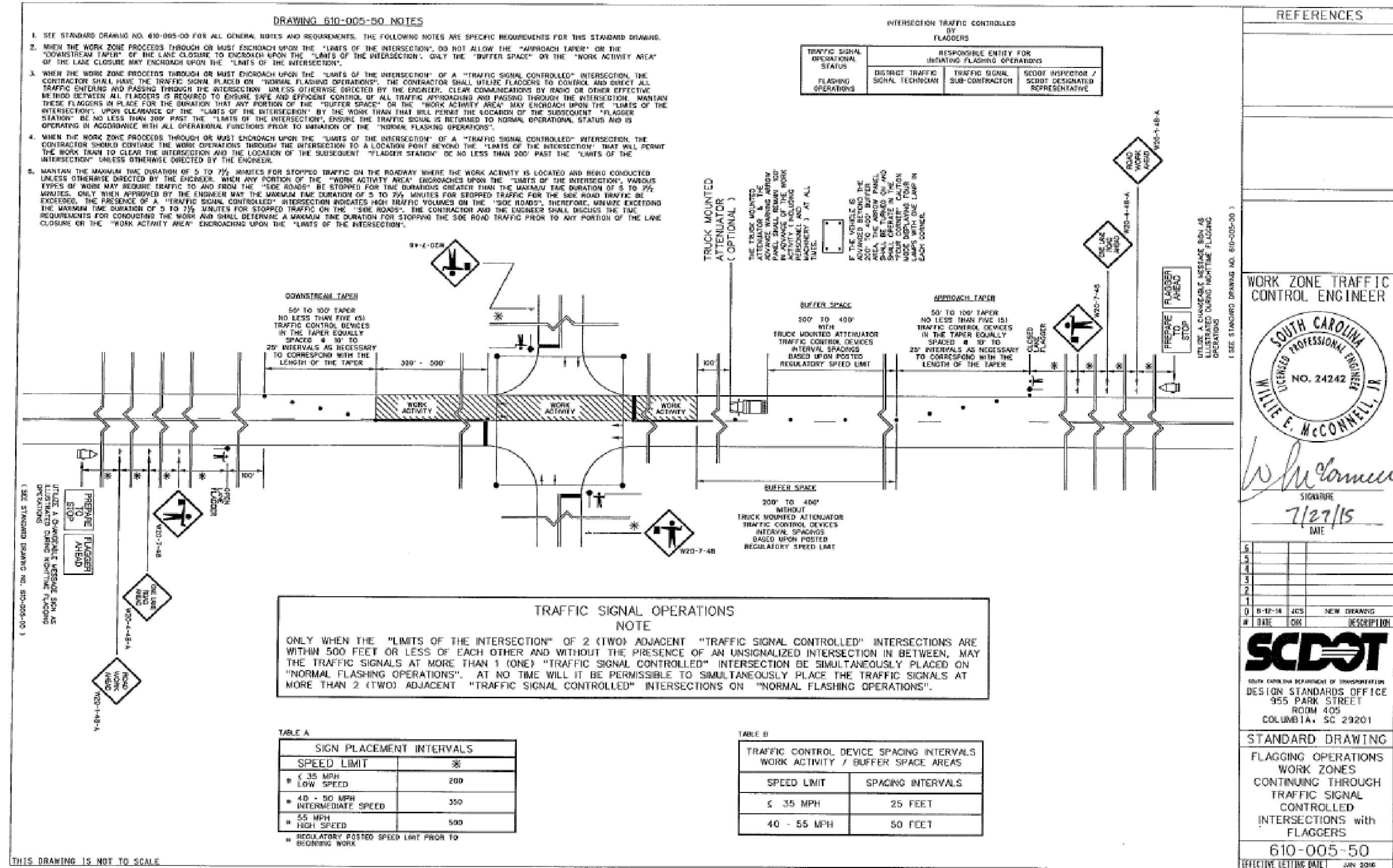
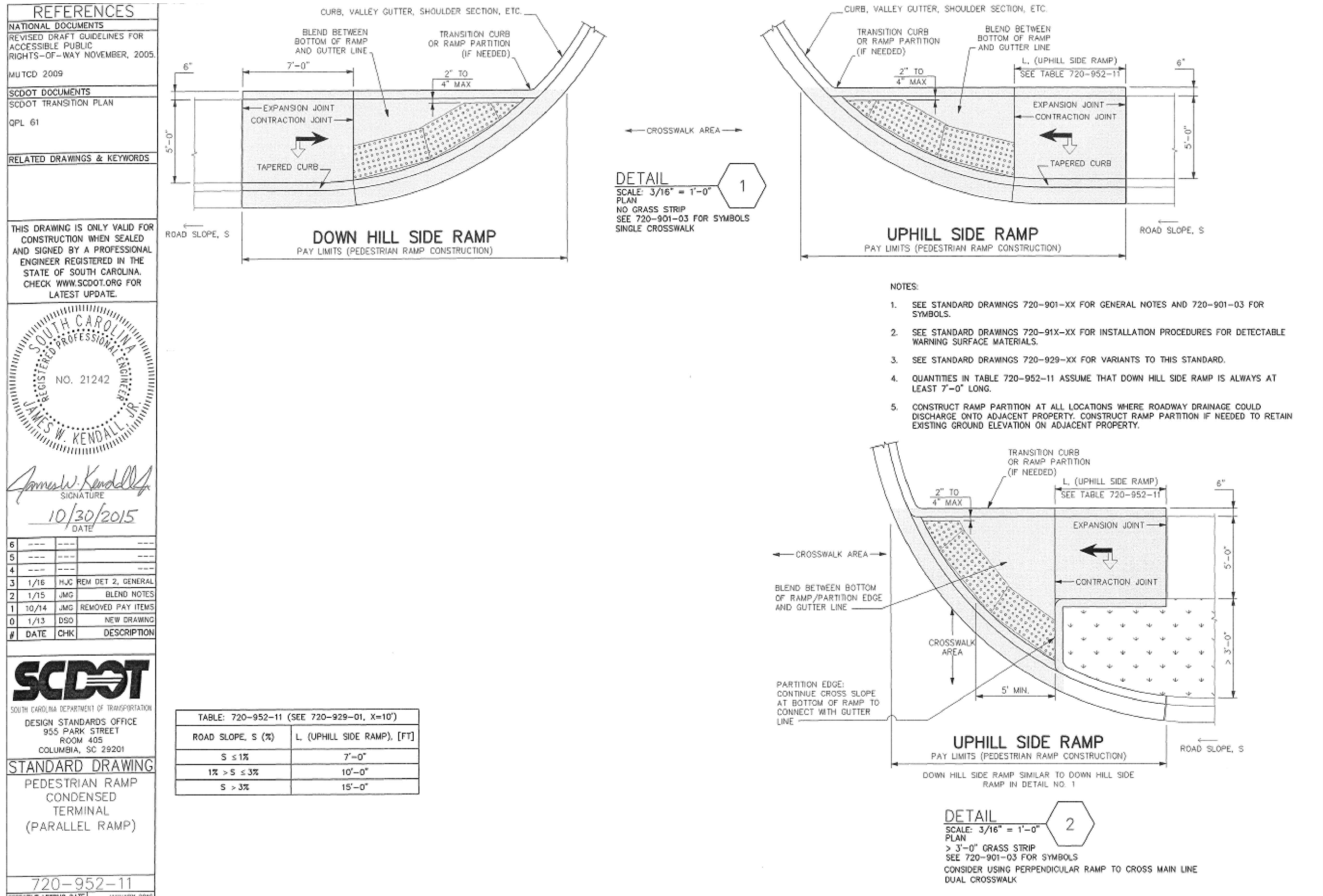
CITY OF GREENVILLE




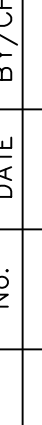
GREENVILLE, S.C.

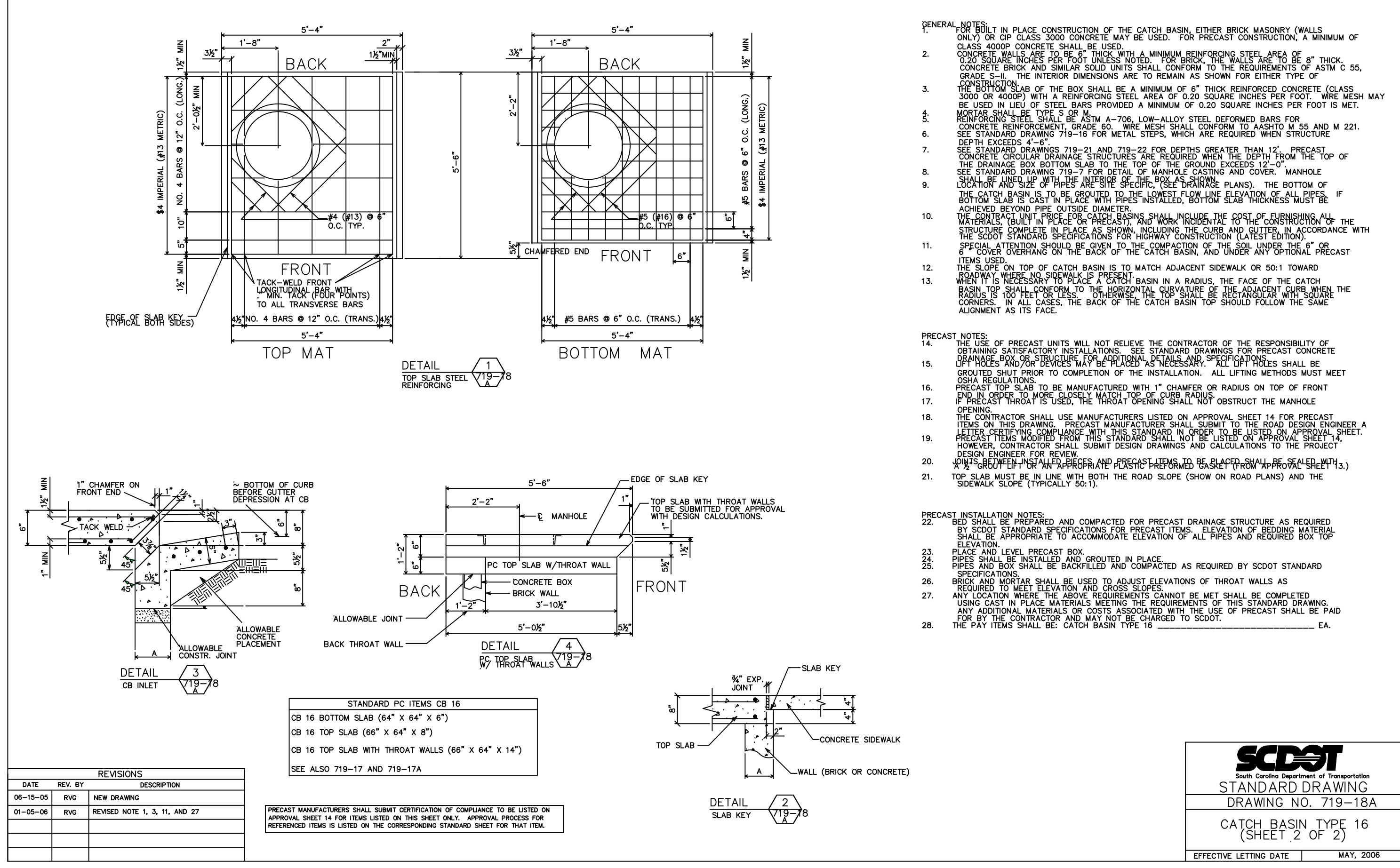
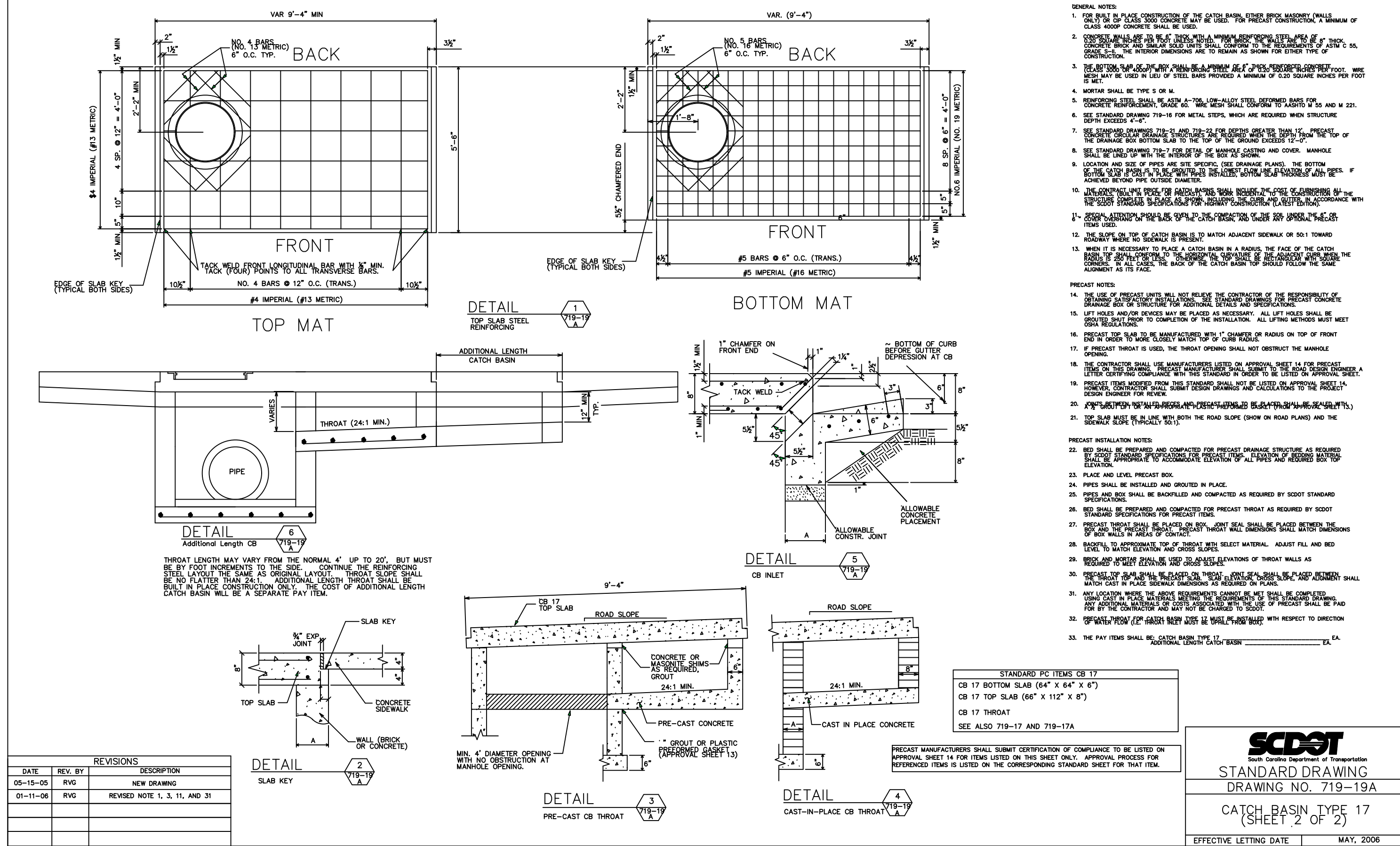
## DETAILS

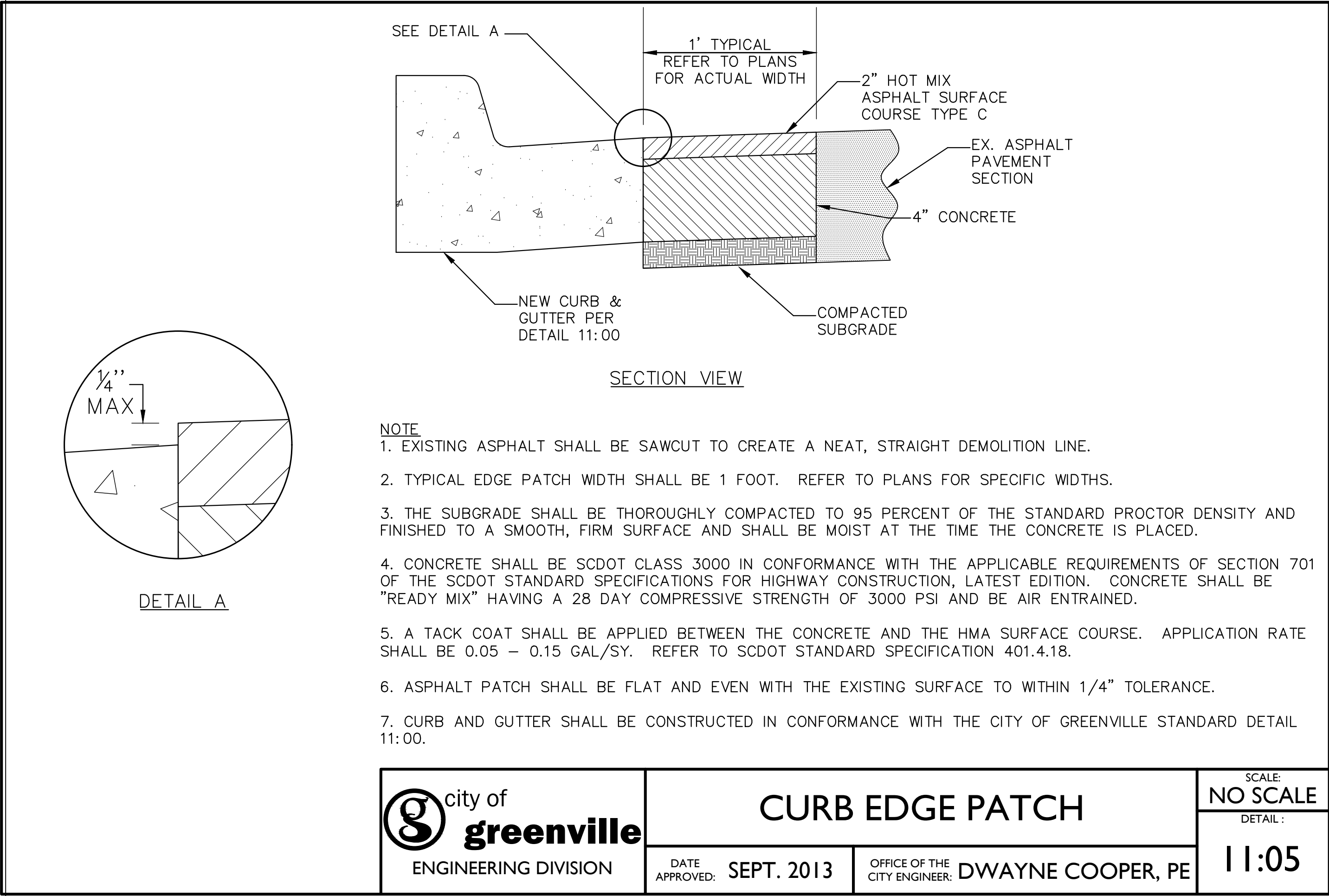
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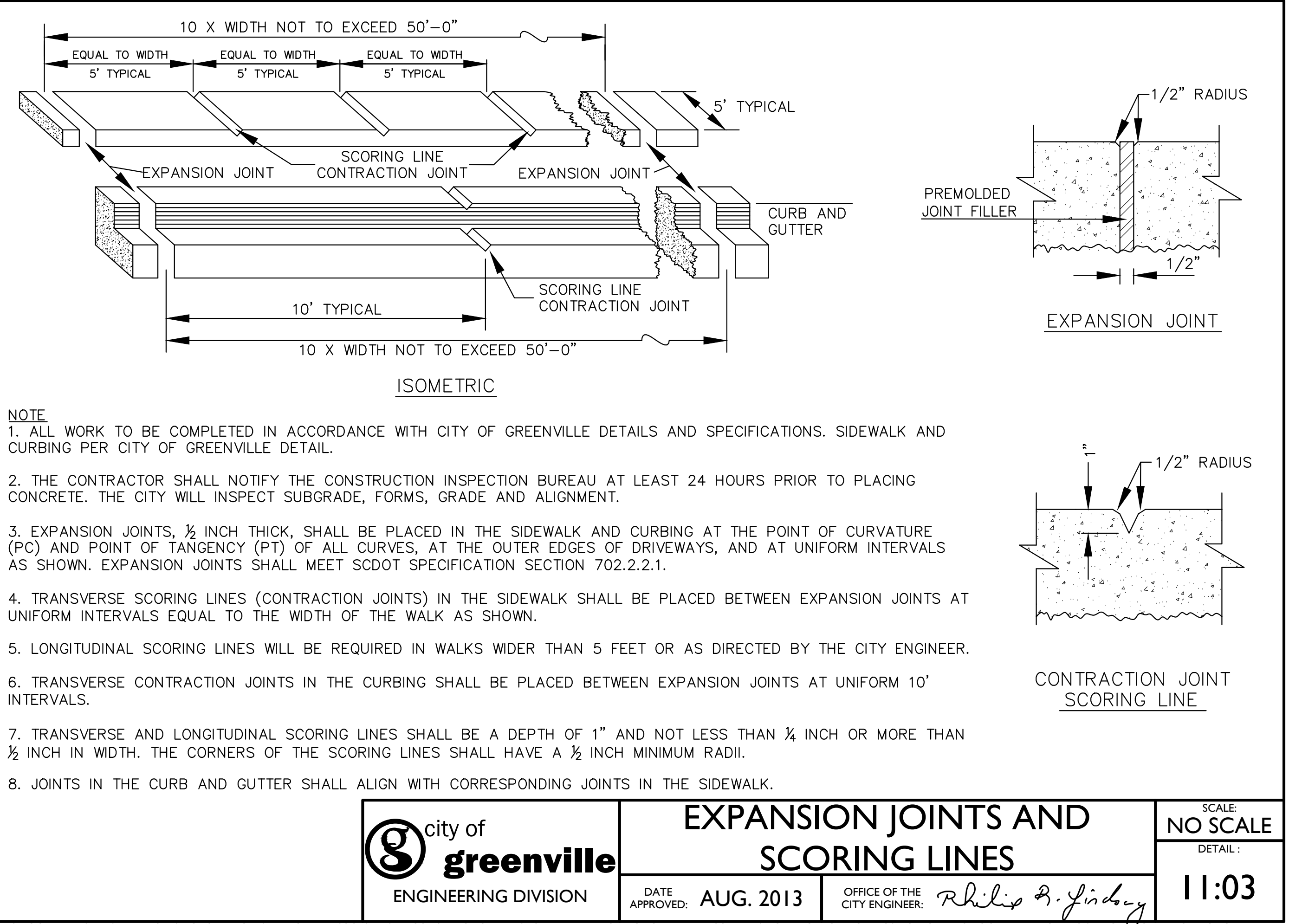
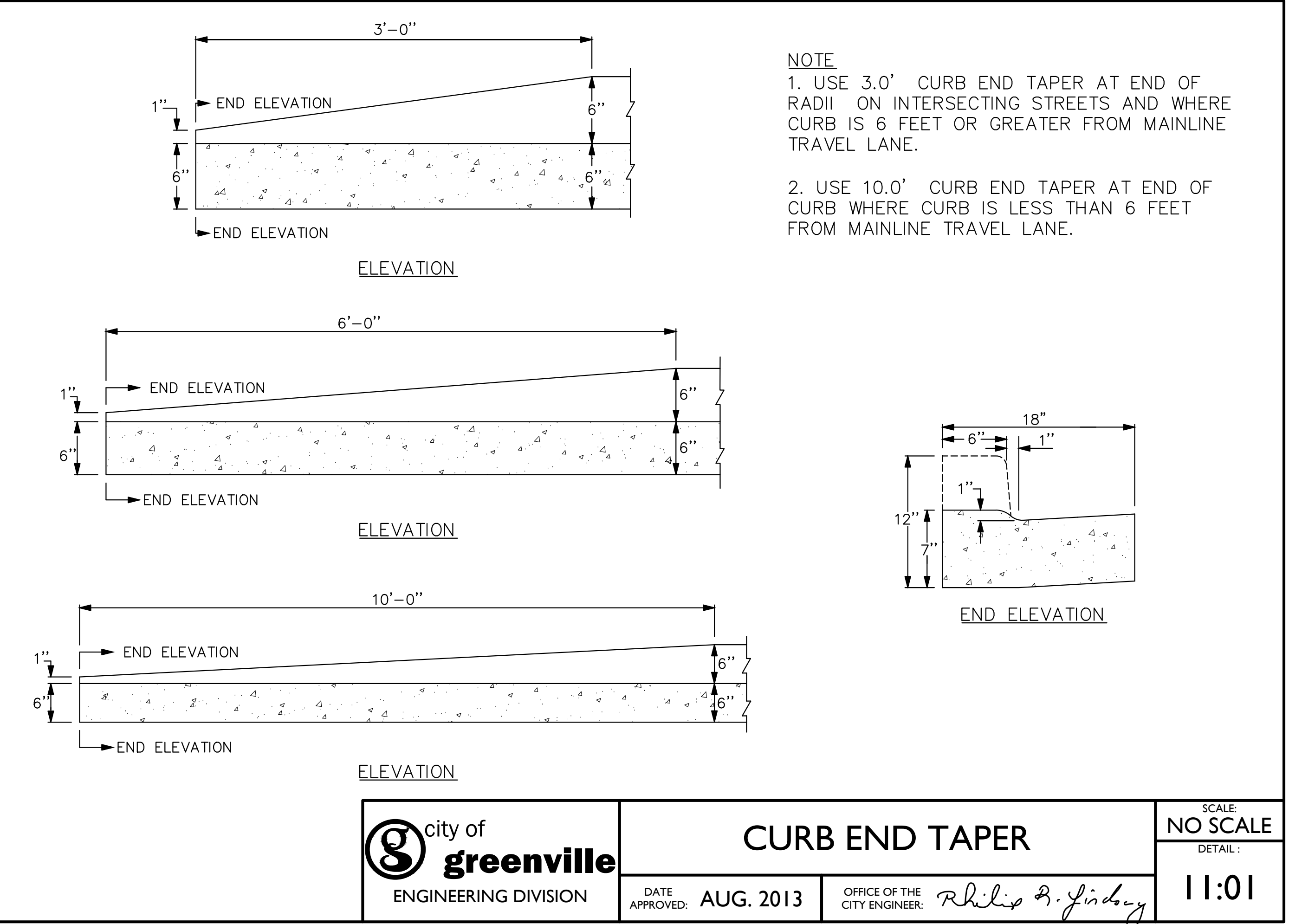
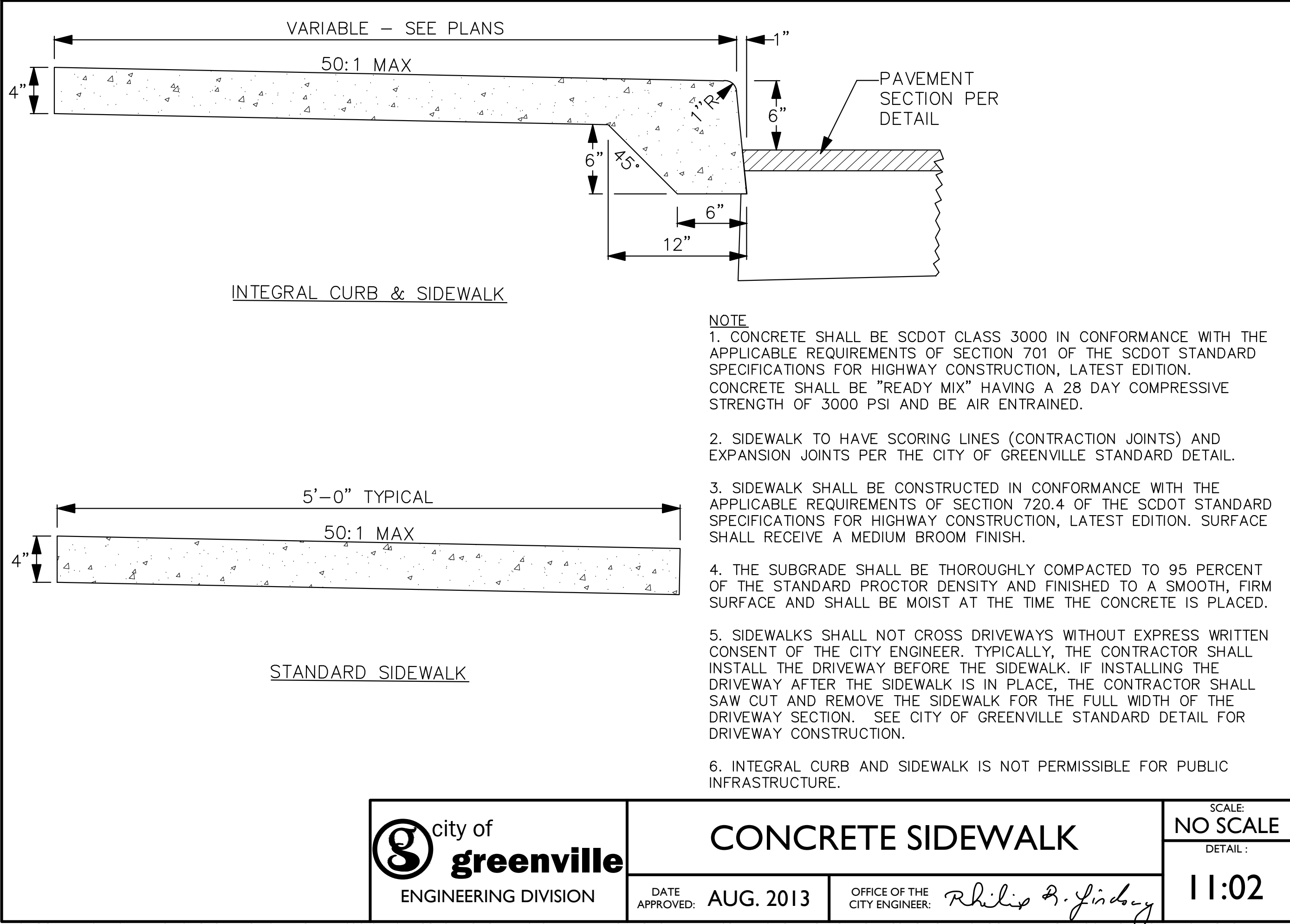
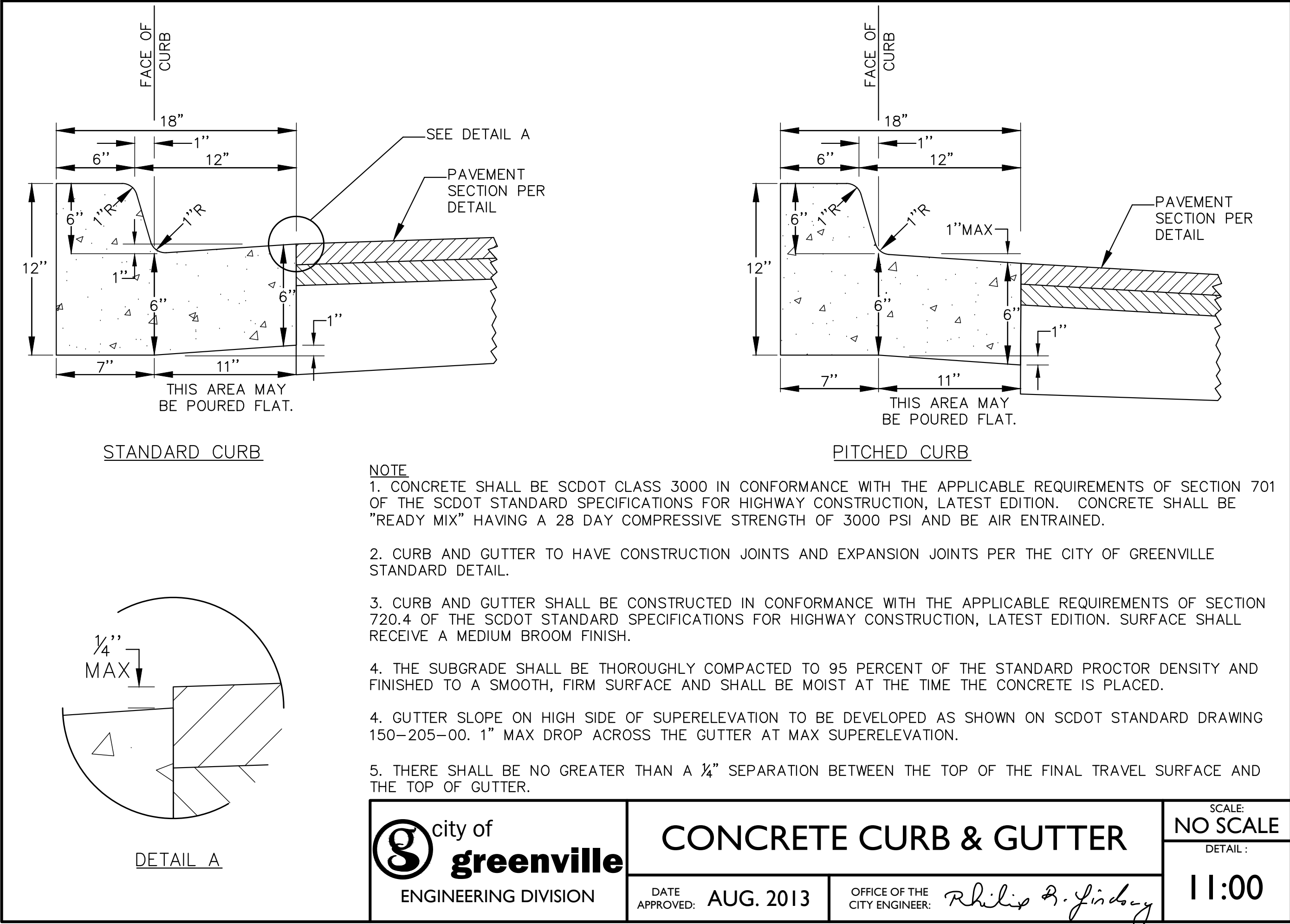


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VWG STREETSCAPE PHASE IV		PROJECT NO. PW3444	
CITY OF GREENVILLE		DATE 5/24/2016	
GREENVILLE, S.C.		DRAWN BY ND	
DETAILS		CHECKED BY CL	
REVISION	No.	DATE	BY/CHKD
			
			
THE CITY OF GREENVILLE		GREENVILLE, S.C.	
P.O. BOX 2207			





3/19/2007 5/6/2013 VWG VI - Title, SOV, Notes, Typical Section, Details.dwg



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GREENVILLE, S.C.

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PROJECT NO.	DATE	DRAWN BY	CHECKED BY	REVISION	BY/CHKD
PG0444	5/24/2016	NO	CL		

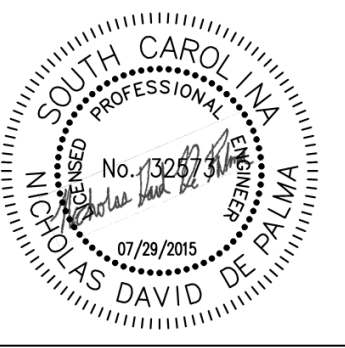
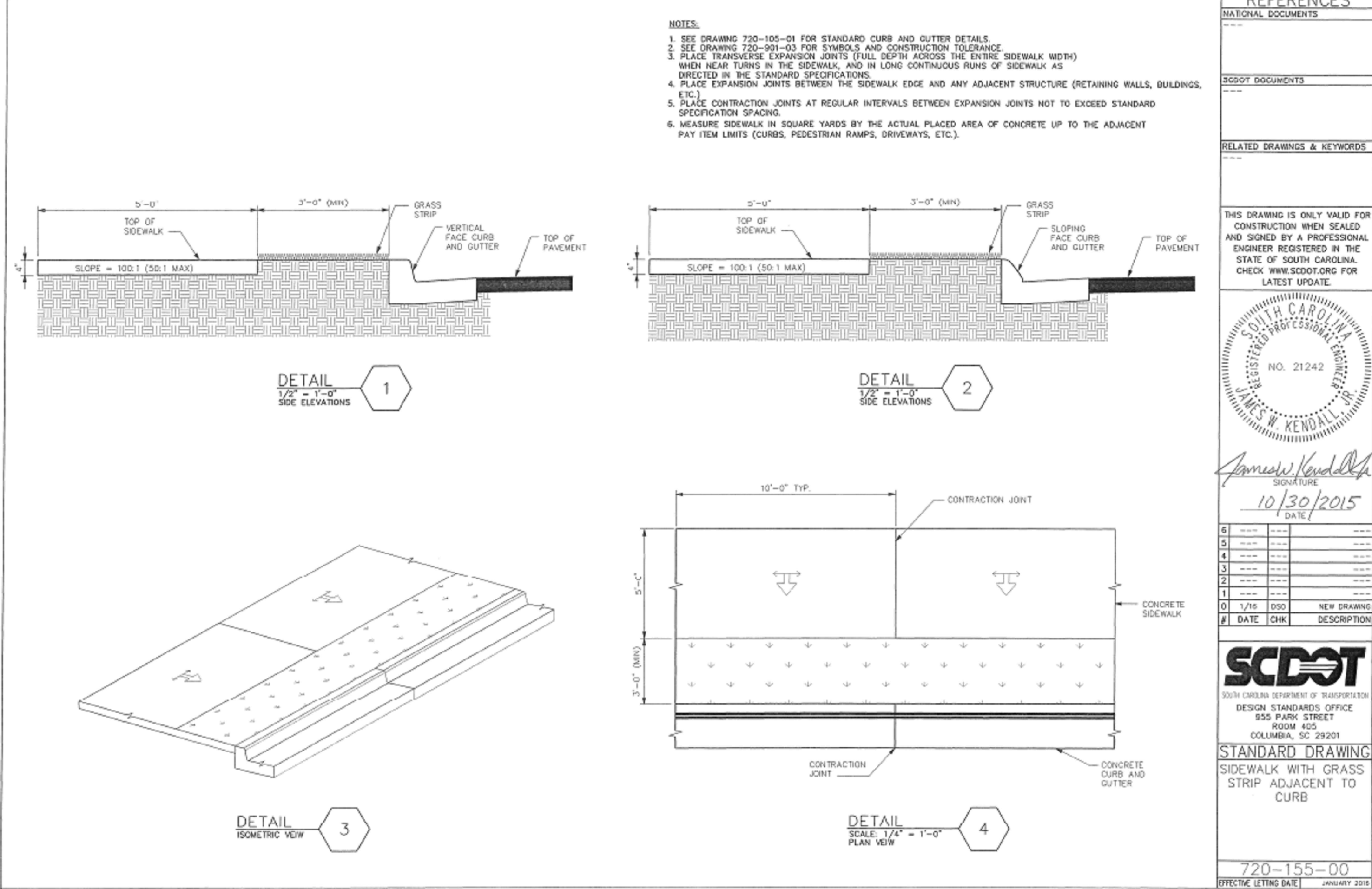
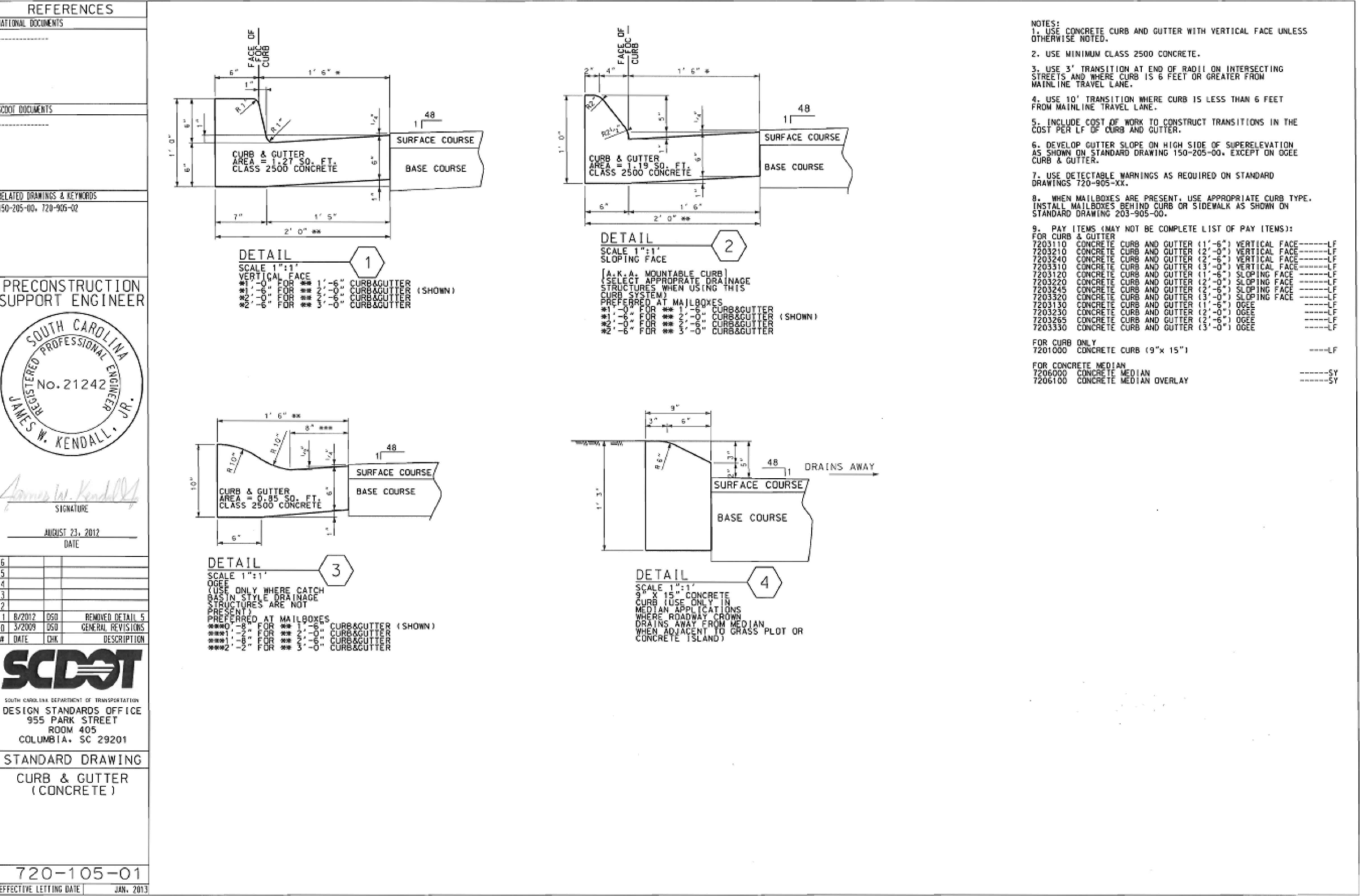
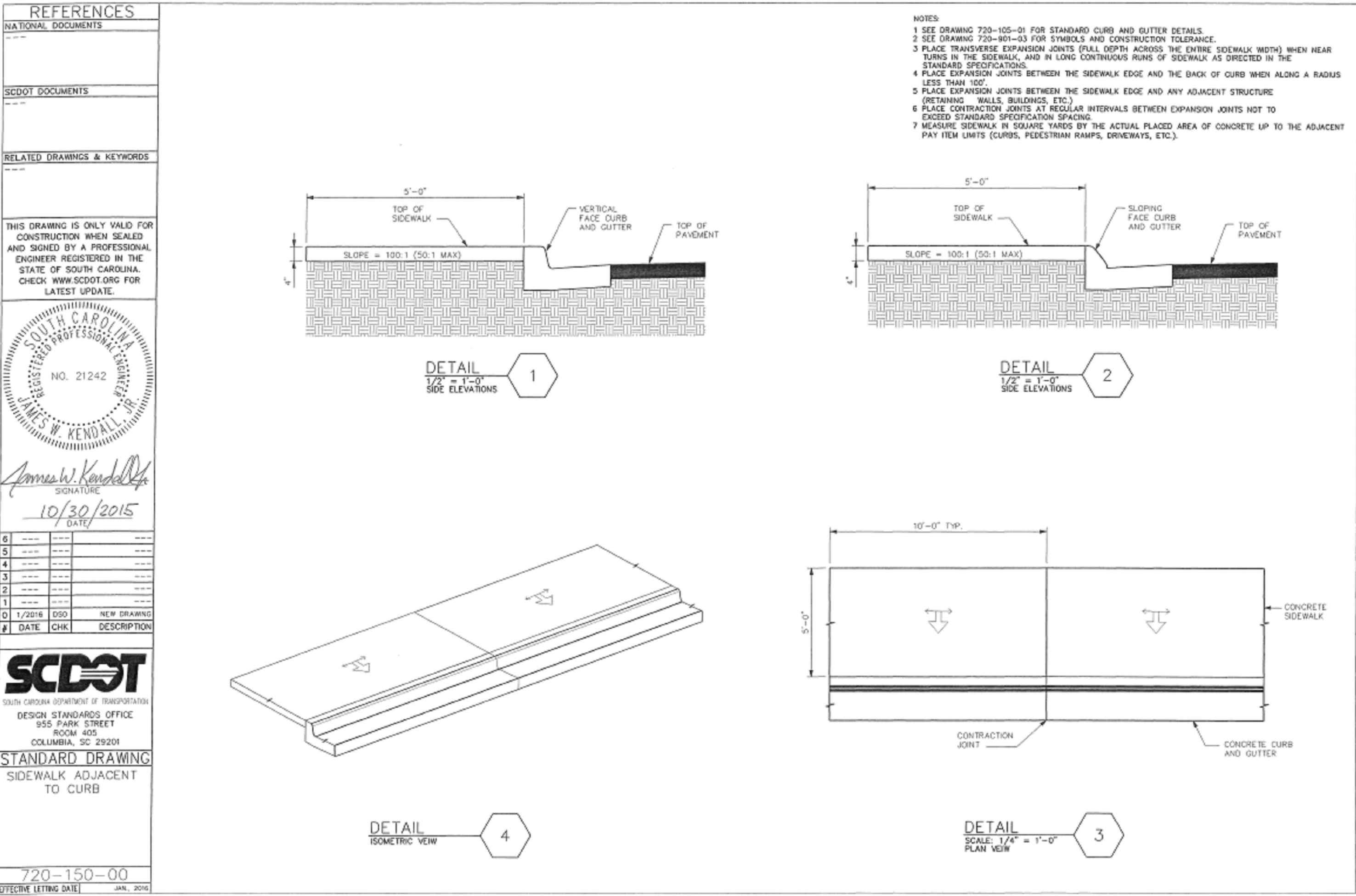
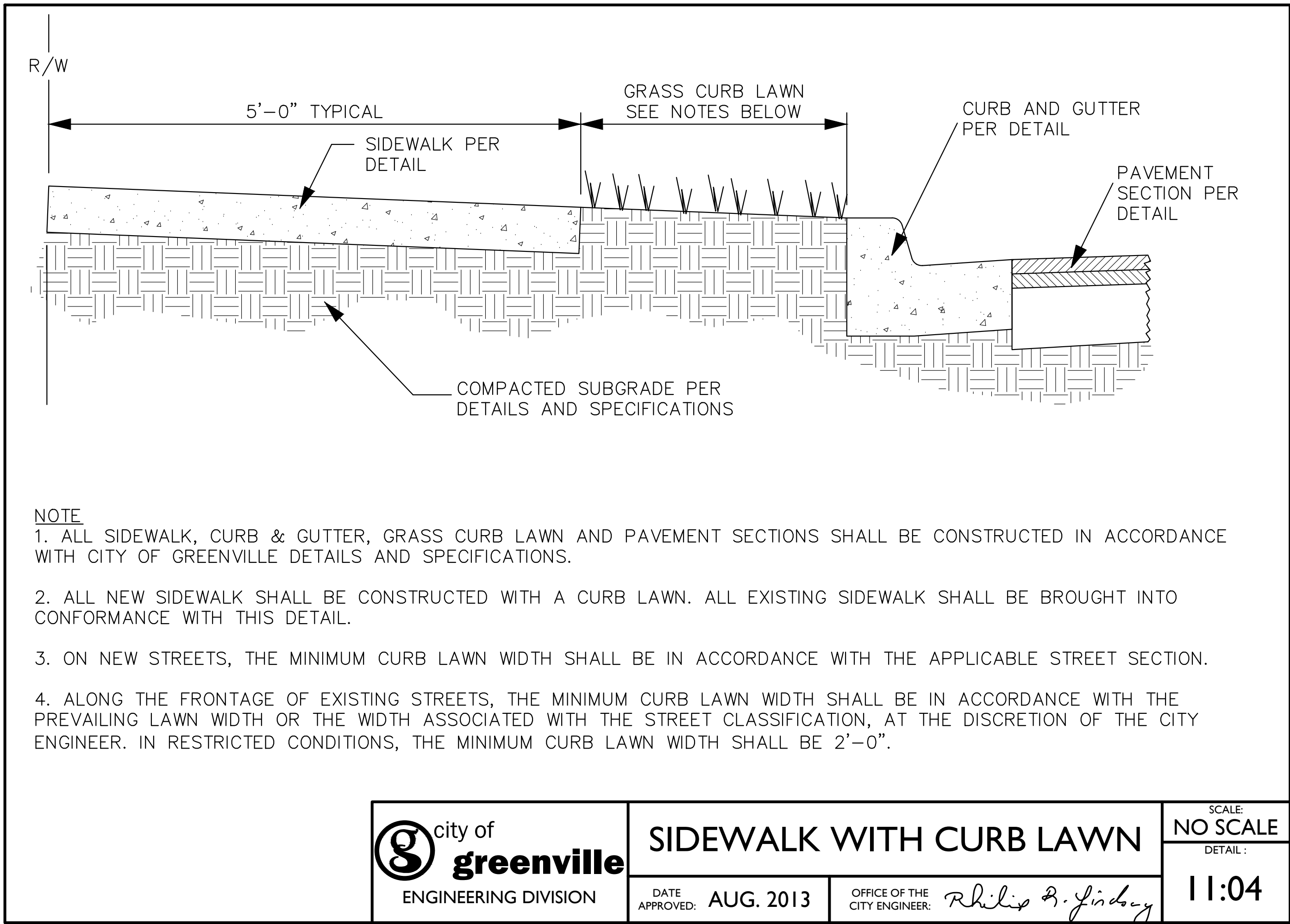
**VWG STREETSCAPE PHASE IV**

**CITY OF GREENVILLE**

**GREENVILLE, S.C.**

**DETAILS**

DRAWING NO. **D7**



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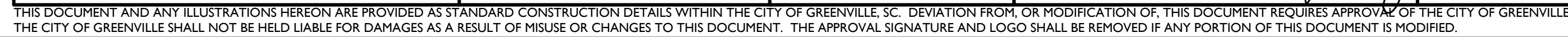
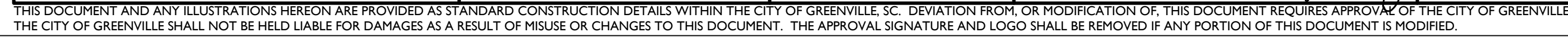
PROJECT NO.	DATE	DRAWN BY	CHECKED BY
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REVISION	DATE	BY/CHKD

VWG STREETSCAPE PHASE IV  
CITY OF GREENVILLE  
GREENVILLE, S.C.

DRAWING NO.  
D8

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